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UNIVERSITY OF ALBERTA

AN INVESTIGATION OF THE AESTHETICS OF LEARNING

BY

SUSAN J. TOWNSEND

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF M..Ed.

IN

EDUCATIONAL PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL 1990

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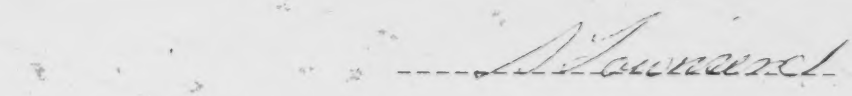

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SUBMITTED BY: SUSAN J. TOWNSEND

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DATE: OCTOBER 5, 1990

DEDICATION

TO BREN: For your impeccable timing and your ability to both distract and motivate; for your constant companionship and ability to keep my world both simple and complex; for keeping this experience both sane and human. Thank You

ABSTRACT

Five teachers were engaged in conversational interviews regarding teaching practice and learning. Specifically they were asked to recall and report in anecdotal fashion experiences in which they had observed a student demonstrate learning. Second they were asked to reflect on and relate the experiences of teaching associated with the examples they provided. Hermeneutic understandings structured both the ongoing development of the inquiry and text interpretations. The investigator maintained an active involved stance; the explication of the resulting subjective understandings was developed, documented, and integrated with the research itself. Two levels of interpretation were provided: the first to document thematically the essential aspects of the experiences and subsequent reflections; the second to engage the metaphor of aesthetics to develop further illuminations of the text. Thematic analysis of the anecdotal accounts resulted in the generation of essential characteristics which were identified in all the teacher accounts. They emphasized the co-constitutionality of the learning experience between teacher and student; the importance of technical awareness and craftsmanship; and the affective characteristics associated with learning. In an aesthetic framework the related experiences could be understood as highly significant, as existing outside the stream of regular experience, as symbols of idealized teaching/learning expectations, and as agents of extremely positive

emotional experiences. The teacher reflections were highly individualized and were interpreted as insights into the ways teachers activate their personalities within the learning /teaching context. Comparison with aesthetic understandings supported this view and provided further understanding regarding the inseparability of self from acts of creativity and intentionality. Reflective methodology, specifically the interview method developed in this inquiry, was challenged in terms of the assumption that reflection would be sufficient to elicit tacit understandings of teaching practice.

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I would like to acknowledge my committee, Dr. Alan Vander Well, Dr. Bruce Bain, and Dr. Theresa Craig, for their patience, support, and calmness -- for allowing this inquiry to become a reality despite the constraints.

In addition the insights they expressed have become an important aspect of this inquiry and ongoing plans for further inquiry. The opportunity to interact with them over this inquiry, to share their reflections, clarifications, and associations has transformed my own perspective and will undoubtedly find expression in further professional activities and development.

The time, energy, and support of the cooperating teachers was also immeasurably appreciated. Experiencing their energy and commitment to teaching was in itself a source of refreshment and illumination to me.

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Chapter I: The Evolution of Inquiry

A Personal Perspective

> But I suspect for many of us there remains the vision of developing a means to comprehend the diversities and nuances of the educational experience. And if we can come to comprehend it, then perhaps we will find the will to transform it. (Rist, 1977, p. 48)

Behind every research project there is a belief system and a world of experiences; there is a story to tell. This story is about the fundamental yet dramatic shifts that have occurred and are occurring in my pedagogical understandings. It is a story about my evolution, discoveries, and sense-making. It is a story about me.

Some stories start best with an organizing principal: an essential truth or other construct that establishes tone, focus, and direction for the writing which follows. This is such a story. And this is how it starts: *Teaching is much more like art than it is like science.*

This statement is not an attempt to avoid the realities of education nor to promote educational speculation and superstitions. Rather it is made to articulate a growing awareness and concern that the essence of pedagogical experience is misrepresented by the

prevailing attitudes and approaches to inquiry; both in terms of the questions asked and the expectations arising from the results. It represents the frustration and concern created by what I, as a practitioner within that belief system, have been able to produce when attempting to improve educational practice. It is a metaphor for the kinds of educational phenomena I am most interested in reflecting on, explaining, and developing into a personal pedagogical stance.

I have spent most of my life close to educators: as a student, as a support professional working alongside teachers, and as a teacher of teachers. I have never taught in a classroom nor have I been formally educated as a teacher. I am a fringe educator -- an "external expert". As such, I operate within education with unique freedoms and constraints. The freedoms have enabled me to meet a great many teachers and, for a brief while, be a part of, a great many classrooms. My role has exposed me to the many aspects of schooling: the politics, the organization, the culture, and, of course, the curriculum. Perhaps my greatest freedom has been an opportunity to reflect on and give meaning to these awareness and experiences and to change what I do to fit this evolving pedagogical understanding.

Significant constraints must also be acknowledged. My role has been to assist teachers in optimizing classroom environments, instruction, and curriculum. This role was performed without any lived experiences in teaching. Without this foundation, I initially relied on what research told me about educational variables: variables

associated with learning, variables leading to enhanced student achievement, variables that ensure classroom organization and behavior control, variables to support individualization and student self-esteem, and so on. I interpreted my role to be that of "trainer"; my duty was to develop a teacher's ability to manipulate educationally significant variables. I was also preoccupied with testing and test results. A teacher could not tell me a student was in need: only test scores could make such a pronouncement. It was a time in my career that I was most in harmony with the science of education. I mastered vast amounts of cause and effect theorems: the principles of teacher effectiveness -- or so I thought.

Eventually, I began to perceive that this splintered knowledge was difficult, if not impossible, to make operational in classrooms. Perhaps it was teacher feedback or my own painful observations that the results of these directive recommendations rarely exceeded short term, isolated change. These outcomes fell far short of my personal standards for creating change and client satisfaction. I was not satisfied with the results I was seeing: for myself, for teachers or for students.

My next avenue of exploration was in the direction of complex educational schemas and models; the guru phase of my career. I was either following one guru or I was adopting the role myself. These models were more complete; a ready-made synthesis of multiple variables and considerations. Teachers were provided with a whole package which required adoption and multiple levels of

implementation. These were well designed, well integrated models, with many metaphors and decision making schemas to better meet the needs of teachers. Once again, I did not accurately perceive the reaction of teachers. The models were either absorbed or discarded, not because of their educational sophistication, but because of their degree of harmony with individual teacher's present pedagogical practices and beliefs. Teachers used these models primarily to substantiate and justify their current classroom practice. To the teacher, these materials were valued more for the articulation of the teacher's personal art or craft and their creation of an instinctive sense of fit or familiarity than for providing answers to unsolved questions or problems. All too frequently they failed to be effective catalysts for the introduction of new answers or new ways of doing things. Once again, by my standard of evaluation, the results were unsatisfactory.

Cause and effect rules were too simple and generalized to make a difference; models and schemas were too complex to be absorbed by teachers unless they closely matched their present *modus operandi*. What was left to offer teachers -- teacher-proof curricula? -- The reduction of teachers to educational technicians? I could not denigrate the many excellent teachers I had met by allowing my practice to develop any further in that direction.

I am left with a struggle to define and understand my own role and practice. I have learned that the classroom is so complex it defies simple analysis or description. It has become a world with temporal,

spatial, historical, inter and intra personal and group social dimensions: all operating simultaneously. When it works, it becomes a wonderful creature -- its whole is much greater than the sum of its parts. Conversely, when it does not work, the mending of each separate, crippled body part rarely leads to a healing. The complex context of the classroom defies simplified and over-generalized solutions. Where then does a professional, such as I, fit in?

As I have said, the empirical data, models, and methods had their greatest impact in increasing the enthusiasm, energy, confidence, and commitment of teachers who had already achieved a productive wholeness in the classroom. I could not teach a teacher to create that wholeness. On occasion I saw the essence of the classroom become more vital; more often it remained elusive, intangible, and immune to external pressures for change. Science does not yet understand how teachers create the world that is the classroom. Personally, I believe that it is collective, creative, and complex -- I want to call it art.

In the past, I believed in the epistemology of cause and effect and of prediction and control. I believed that, if I accumulated enough bits and pieces about learners, teachers, and their contexts, I could build an understanding of the essences of pedagogy -- a whole. Instead, I have acquired a great deal of empirical knowledge, a wealth of isolated applications, and a technical vocabulary which verified just how much time I had spent in pursuit of classroom, teacher, and student cures.

Some teachers appeared to need to believe in this science as much as I did. As I struggled to understand their creations, they waited, either for approval or for the formula that would cure their ills. The trust that they placed on my fractured understandings was often completely at odds with what these understandings could and would achieve. Other teachers, perhaps weary of the tremendous limitations of science, blocked this input, desiring instead to practise their craft to positive or negative ends without interruption -- in privacy. The extremes of too much dependency or too little interest were always apparent.

Observation in classrooms has shown me that teachers are extremely consistent in the types of results that they are able to achieve. When queried about these consistencies, they respond with hesitation. Many teachers seemed unaccustomed and uncomfortable with sharing their understandings about their classroom worlds and their operation on a practical day by day basis. Yet, guided by these understandings, a tacit and intuitive epistemology of practice, they have the ability to be both spontaneous and consistent. This is the art or craft that, to date, science only names in a fractured manner and, by so doing, misrepresents it. By searching for, and attempting to create uniformity, an essence of the educational experience is lost. It is the distinctive mark that a teacher makes on a classroom, for good or for worse, that makes the classroom real.

Before I can establish a direction and role for myself I need an opportunity to experience teachers: their constructions of the classroom world, their reflections on the teaching encounter, and their beliefs about how as individuals they make a difference to their students. I desire less to ask a question than to hear an account. I have a history in education; I have discovered any question I ask projects from a complex web of internalized understandings. While this history is a part of me and not divorcable from my present endeavors (it is in fact what has lead me to this place), I wish to suspend it somewhat and embrace the familiar through someone else's eyes -- those of the teacher. I wish to do so in a manner that enables me to hear what the teacher considers important to say; not what I consider important to ask.

In order to achieve my purpose I need to expand my understandings of research methodology and strategy. I have discovered many signposts and clues to hasten my release of tired but comfortable ways of knowing and to provide my introduction into new and different understandings. However, the very nature of the investigation is a quest: clarity only can come through exploration and reflection. Here at the beginning then, signposts and clues must be sufficient:

Grounding My Experience

> In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be, while in the swamp lie the problems of greatest human concern. The practitioner must choose. Shall he remain on the high ground where he can solve relatively unimportant problems according to prevailing standards of rigor, or shall he descend to the swamp of important problems and nonrigorous inquiry? (Schon, 1987, p. 3)

My personal journey has not been in isolation. The concerns that I have experienced, begun to explore, and attempted to label are the concerns of many. There is even a case to be made that the issues are not unique to education; professional practice generally is feeling the strain of reductionist thinking and over simplification of professionalism. This is the heritage of our present social context: one which validates itself by searching for law-like regularities and

empirical documentation. Thus we have rules for practice, formula for decision-making, and criteria for the products we generate. While we perhaps feel safer and more accountable with this technical structure to support professional action, in reality, it bears little relationship with day to day practice.

In education, as with other professions, it has been observed that research and professional practice have separated and no longer share a common agenda. A substantial portion of present research is directed towards the provision of generalizable answers to well-formed, technically manageable questions. The questions are often determined by a current theoretical trend, of a cause and effect nature, and designed to provide information on idealized or perfect educational situations. Understandings generated by this research rarely become direct catalysts for change; their importance becomes attenuated and is viewed as a low priority by classroom teachers who struggle with very different questions (Carson, 1986).

The problems of practice are often localized and individualized; practitioners seek to improve their understandings of their own contexts and interactions rather than generalized or idealized ones (Carson, 1986; Schon, 1987). A research system which creates ever increasing expectations for teacher performance and technical mastery but provides no resolution of perceived "real problems" can only lead to teacher frustration and burn-out. The severity of this problem increases as long as research which emphasizes change and isolated

understandings is sanctioned above research which promotes understanding from a classroom and teacher perspective (Biddle, 1981). Fortunately some progress has been achieved in creating understandings which challenge these long standing biases related to the control of pedagogical practice.

Schon (1987) used the term "intermediate zone of practice" (p. 6) to refer to the contextual problems and situations which constitute the most serious challenges to practitioner success. Ambiguity and complexity are the primary characteristics of these in situ problems. The ambiguity arises out of: (a) uncertainty -- the exact problem is difficult to stipulate and requires a wide frame of reference to establish the essential problem parameters, (b) uniqueness -- the problem falls outside of identified and familiar categories and existing theory, and (c) a value conflict -- solving the problem requires a compromise of the practitioner's value system (Schon, 1987). Professional problems like these defy "technical rationality". Technical rationality does not leave room for the uncertainty of actual (verses theoretical) practice. Most professionals are trained in academic rigor without opportunities to integrate and develop an applied practice.

Some practitioners function very well in this "indeterminate zone of practice". What they do is not understood in terms of science -- it is understood in terms of "talent", "giftedness", or "intuition". As Schon (1987) states: "Inherent in the practice of the professionals we recognize as unusually competent is a core of artistry" (p. 12). These

practitioners possess some form of "knowing" or "doing" which is critical for effective performance. It is knowledge which reveals itself in action; skilled problem solving that is undertaken spontaneously, without an apparent ability to state the rules or process of implementation. These professionals demonstrate mastery of functional competence, a competence which may not be related to their level of technical knowledge. Examination and explication of professional artistry is attracting increasing attention; the focus requires a shift from a prescriptive attitude towards professional practice to a respectful appreciation of the experienced practitioner.

Within education attempts to capture the notion of teaching competency have resulted in a variety of terms: Hunt (1987) called the knowing "teacher implicit theories"; Elbaz (1983) and Clandinin (1986) used the term "practical knowledge"; Brown and McInture (1986) used "professional craft knowledge"; and Butt, Raymond, and Yamagishi (1988) used "personal practical knowledge". All of these terms reference a knowledge base which combines the individual personality, style, and values of the teacher with their practical experience, their internalized theoretical knowledge, and their problem solving skills. So complex is this cluster of knowing that it defies systematic probing and technical duplication -- placing it out of reach of much of traditional research.

The case has been made that accessing the world of teachers and teaching artistry is frustrated by teachers themselves who are

professionally socialized to rely on and place their confidence in expert authority rather then in themselves (Barritt, 1986; Hunt, 1987). The emphasis in research and professional training has been on "the mastery of technical skills which tend to separate the *act* of teaching from the person doing the acting (teaching)" (Hultgren, 1987, p. 35). Teachers may unintentionally accept and internalize this customary perspective of themselves and their craft.

While powerful social and cultural forces drive and perpetuate this belief system (see Chapter Two for more detail), teachers also experience a very human difficulty accessing and articulating their craft. Like all forms of practical intelligence, tacit craft knowledge requires an actual context to activate and begin to manifest itself (Wagner & Sternberg, 1986). Therefore it is very difficult to learn about or discuss; doing so removes the context, objectifies the knowledge and transforms it from a personal, implicit, and spontaneous understanding to an espoused understanding. It's very nature is changed. It moves from an active way of intelligently interacting with the world to a static theory of practice. Given that it is difficult for teachers to make this transition, it is difficult for them to credit, depend upon, and advocate research attention to their own teaching artistry.

Schon (1987) advocated the adoption of reflective practicums in professional schools to develop the skills of "knowing-in-action" and "reflecting-in-action". Advances in teacher preparation also suggest that developing reflective and personalized pedagogies may be a

powerful alternative for preparing teachers for practice, replacing the more traditional, technical, and behaviorally driven methods (Hultgren, 1987). These attempts to realign theory and practice serve as a useful model to research and inquiry directions. Re-establishment of connections between the real issues of classroom practice, teachers themselves, and the goals for reform and improvement is important. Principles and guidelines for change would spring from an understanding of the complexity of what teachers must understand and be able to do rather than from isolated variables and fragmented views of the classroom.

The attempt to realign theoretical and practical worlds in education has spawned a relatively new direction of research. Rather than viewing the teacher as a passive technician implementing mandated instructional techniques this view seeks to understand the teacher as an active agent in the classroom. This is achieved through explorations of teacher's thought and lived experiences. While "the state of the art" of this trend will be discussed in detail later, some introductory comments are appropriate.

Many questions regarding the methodologies of choice have yet to be answered; the current research is as much an exercise in the "trying on" of methodology as it is a results generating process. How can teacher's reflection and awareness of their personal teaching artistry be facilitated? What is known about tacit teacher knowledge and how can it be studied? Can effective methodology be developed to

capture the phenomena of practical teacher sense-making and problem solving? These are all questions which are as vital as the questions regarding the nature of teaching artistry itself. Research in this area is as much process generating as it is product generating.

Some commonalties and assumptions seem to be emerging to provide structure for the research which follows. In launching an investigation into teacher's internalized perspectives of teaching and learning the following beliefs and premises will be used to ground further planning:

1. That skilled teachers have a tacit system of understanding which allows them to sense-make in their classrooms in an intuitive and spontaneous fashion.

2. Understanding this system requires a flexible and evolving methodology but core reliance must be placed on a teacher's ability to be reflective and to formulate language experiences to communicate these understandings.

3. That the essential question cannot be asked by the researcher but rather the role of the researcher is to establish a context to facilitate the expression of teacher craft. Teachers must be allowed to create their own significance.

4. That the results be accepted as only a partial image of reality. It is bound by the context of the research purposes, the prejudgments and outsider perspectives manifest throughout the data gathering, by the research methodology, and by the teachers

themselves. The extent to which they are able to immerse themselves in a co-researcher's role and utilize language and reflection to externalize their experiences is critical.

6. Since individual teacher perspectives are being sought, this is really research into the individual case. While there may be commonalties or universal constructs, the essence is the attention to the specific rather than the general.

7. That interpretation of the words of the teachers will require the words of the researcher -- thus bringing an additional voice and story to the text.

Chapter 2.

Building From the Ground Up: The Role of Experiential Knowledge in Education

> While we live more than we can say, we can express more than we usually do if we make the effort, and nothing prevents us from describing our experiaction more carefully. With our ability to observe, remember, report, and reflect on both our own and on other's experience and action, we have a rich source of materials from which to build a truly human science psychology (von Eckartsberg, 1986, p. 3).

Intention & Reflection in Human Sciences

Research, the expansion of human understanding in a systematic and planful way, is a natural extension of a more basic human need: the need of humanity to understand and reason about itself, its own social affairs, and the physical world that surrounds it. Research questions, methods and results are deeply embedded in the values and visions of present social orders. Our present understandings regulate and prescribe our future understandings; the more we relate to the inherent complexity and contrariness of the human experience the greater our range of inquiry options. Certainly this is the ideal -- historically it has seldom been a reality. The

acceptance of diversity in the ways knowledge can be sought and structured relate directly to the acceptance of a pluralistic world view; an acceptance of a "divergence in vision, custom and tradition" (Popkewitz, 1984, p. 35). Popkewitz (1984) clarifies further:

> "The concept of paradigm provides a way to consider this divergence in vision, custom and tradition. It enables us to consider science as having different sets of assumptions, commitments, procedures and theories of social affairs. In the disagreements are fundamental issues about values and visions of social order. The conflict revolves not only around technical issues but around the essence of social institutions. (p.35)

In the recent history of human and social inquiry, the debate about the varied ontologies and epistemologies that underlie research paradigms has become as characteristic to the varied fields of endeavor as the research itself. Social and human understandings are becoming increasingly multifaceted, divergent, and even contradictory. As the explicit acknowledgement of these developments grows so does legitimacy for alternate and varied means of inquiry. This is not to say that critiques and opposition to the various understandings is absent; rather, that the debate is overt and therefore accessible. The lack of immediate and clear resolution and the failure to establish a single right answer for human science research, allows this diversity to exist.

Potentially, albeit only on a pragmatic level, there may also exist the opportunity for complimentary practice; each paradigm providing enlightenment on different aspects of humanness.

The present debates in human sciences inquiry have created a dichotomy of orientations; a duality of belief systems that offer little latitude for eventual co-constitution (Rist, 1977). At one end, there is methodology based on the scientific method of the natural sciences -- on the other, a less well defined methodology, based on the concepts of intentionality and human reflection.

The scientific method is based in positivist beliefs that any phenomenon under investigation can be reduced to a set of verifiable laws; that the experimenter (or observer) can identify these laws without personal bias, prejudice, and preconception; and that verification can be completed almost entirely in the physical and concrete world. Originating to counter the subjugation of knowledge by religious dictates, logical positivism (or logical empiricism) became the philosophy of choice. As Popkewitz (1984) summarizes:

> "It is believed that the natural sciences progressed once they freed themselves from pre-Enlightenment religious and social premises, in which inquiry was to understand the word of God. Knowledge was to be developed only upon that which could be observed or made observable (the empiric); that knowledge was to be analytical rather than synthetic, that is, observations were

to separate human behaviors into its constituent elements. It is from these commitments that many called the science 'Behavioral'. (p. 36)

The assumptions of the natural science method are most functionally apparent in the models which are used to structure description in research questions and results. For example:

1. The mathematical model: phenomena and relationships between phenomena can be quantified or defined numerically. Significance and degree of importance can also be established numerically, providing a certain type of confidence about the conclusions made.

2. The computer model: events relate to each other in a linear, causal fashion. Definite linkages can be established which account for sequences of action and their outcomes.

3. The mechanical model: knowledge is founded on the identification of concrete parts interacting to produce action and phenomena. All true knowledge can be reduced to these basic propositions which are physical and can be experienced through the senses.

Further clarification of these assumptions can be gained from an understanding of the scientific method as practised in physical, chemical and biological inquiry. Scientific research requires development, elaboration, and verification of generalizations made

about sense data (information provided by our senses). As empirical generalizations are accumulated, they are formulated into laws. On the basis of laws, theories are formulated. The theory may then give rise to further generalizations which require experimental testing.

The approach is reductionistic: specific variables are identified and isolated; a hypothesis formulated about their behavior; and the exact nature of their relationship is documented. The establishment of certainty and control (through the clear documentation of cause and effect relationships) is a priority. The conclusive nature of this type of research is the foundation of its credibility; to know something with certainty is an attractive proposition -- to individuals and social structures alike.

As the credibility of the natural science model of inquiry was established through advances in basic sciences (chemistry, biology etc.) as well as in applied sciences (medicine, engineering, etc.) expectations for its application to the "soft sciences" (psychology, sociology, economics etc.) was inevitable. As it became more politically and socially expedient to do so, human science in North America, allowed itself to be dominated by these empirical science assumptions and methodologies (Colaizzi, 1978, Giorgi, 1970).

When applied to the study of human behavior, these assumptions shape not only the epistemology of inquiry but also the epistemology of practice. What does it mean to be human if all things human can be quantifiable; if humanity is reducible to a phenomena of

the senses; and if the human experience is logical, predictable and generalizable across individuals? In Erickson's (1986) words this is the understanding of humanness that results:

> "Animals and atoms can be said to *behave*, and do so fairly consistently in similar circumstances. Humans can be said to behave as well, and can be observed to be doing so quite consistently under similar circumstances. Moreover, one person's behavior toward another can be said to cause change in the state of another person. Mechanical, chemical, and ecological metaphors can be used to understand these causal relations, thinking of humans in society as a machine, or as an organism, or as an ecosystem of inanimate and animate entities." (p. 124)

Under natural science tutelage, human nature is conceived as an end product of biology within which thoughts, feelings and actions are determined by a complex network of causes. The meaningfulness of human experiences are not paramount; the regularities and predictability of those experiences are.

The advantage of viewing human nature in such a manner is the ease with which inquiry can attach itself to the solving of relevant political and public issues (Biddle, 1981). The original pressure to adopt natural science practice in psychology was in part, attributable to this.

In practical terms, the desire to control and change commonly takes precedence over the desire to understand. To society at large the former is seen as much more productive and defensible than the latter (Biddle 1981).

While there have been many important understandings created by focusing on practical and socially pertinent problems with empirical methodology, a deficiency in inquiry leading to basic knowledge about humanness and human experience has resulted. The fact that social factors can be directive in the identification of research direction and the application of research results compromises a basic premise of the scientific method: that partiality, predisposition, and presupposition can and are eliminated (Colaizzi,1978; Perrott, 1979).

There are other aspects of the natural science model as it is realized in practise, which fall far short of the prescribed ideal. Natural science researchers are charged with trivializing problems so that they can be understood within the methodological constraints of the scientific method (Kruger, 1979; Popkewitz, 1984; Stigliano, 1986); misconstruing complex problems by allowing already-established theory to frame on-going perception and interpretation of phenomena (Perrott, 1979); avoiding important subjective aspects of the experience of being human (Erickson, 1986; von Eckartsberg, 1986); and over estimation of the generalizability of results (Biddle, 1981; Cronback, 1982).

Natural science paradigms emphasize reliability; it is in this domain that they excel (Rist, 1977). Their inability to place an equal emphasis on validity has assured that other paradigm options have never been completely suppressed. The current revival of paradigm options is based on necessity of the human sciences to be able to pursue meaning, relevancy, and complexity (Colaizzi, 1978; Giorgi, 1985; Pershkin, 1988; Valle & King, 1978; van Manen, 1990).

These so called "qualitative" paradigm positions magnify the human subjective experience rather than denying it. Inquiry is grounded in actual experience; description and reflection are valued above quantification and abstraction. Like natural science, these interpretive approaches are deeply rooted in an ontological perspective. Humans are not perceived as mere objects of biology; rather, they are complex agents of intention, manifesting an intelligent consciousness that creates meaning out of experience. Existence of things in themselves is not meaningful -- it is active human involvement which creates meaning.

Phenomenology, as a philosophy, best represents this valuation of human understanding and experience. Phenomenology is "the reflective study and explication of the operative and thematic structures of consciousness, i.e. primarily a philosophical method of explicating the meaning of the phenomena of consciousness" (von Eckartsberg, 1986, p. 4). This philosophy has given rise to the interpretative approaches towards inquiry. The term

phenomenological has been generalized to cover a broad spectrum of specialized strategies including phenomenological research, participant observation, grounded theory, ethnomethodology, and symbolic interactionism (Polkinghorne, 1982). In actuality there are subtle theoretical differences between these approaches that influence practical application; their essence, however, returns to a belief system based on intentionality (interpretation) and reflection.

Unlike natural science research, based on methodological practices, the interpretative approaches do not define themselves by a procedural technology. The approach is first and foremost an attitude; the focus is directed to issues of content rather than issues of methodology. The question comes first -- methodological strategies are developed without compromise to that question. According to Erickson (1986) "Interests in interpretative content lead the researcher to search for methods that will be appropriate for study of that content" (p. 120). In von Eckartsberg's words:

> The assumption of the phenomenological attitude thus implies that we describe something not in terms of what we already know or presume to know about it, but rather that we describe that which presents itself to our awareness exactly as it presents itself. This movement is crisply formulated in the phenomenological imperative: 'Back to the things themselves!'. (p. 5)

The methodology for interpretative research is not governed by a criteria of reliability but by the indeterminate notion of "faithful portrayal of the phenomena." Implicit is the assumption that this portrayal will require an act of interpretation. Research assumes it can begin with actual phenomena -- the actual event or experience; there is no need for an initiating theory, model, or hypothesis. The researcher can get as close to the phenomena as he needs in order to accurately record, interpret, and communicate the experience. A varied selection of techniques are available to researcher; each offers a different understanding of or way of being true to the phenomena.

Interpretive research has as a goal the exposure and explication of the essences of lived experiences. It provides a philosophy and frames a methodological stance such that complex or holistic views of a phenomena can be achieved. It provides the researcher with a means to understand the basis of a phenomena; in human sciences it provides a means of achieving basic research.

The methodology of the interpretative approach does establish some standard expectations for researchers. As Salner (1986) summarizes:

> Discussions about the pro and cons of phenomenological methodology have served to focus attention on the necessity for the researcher to carefully articulate his or her role, to balance

> direct engagement against detached observation and analysis, and to develop specific techniques (e.g. bracketing and free variation) to deliberately formalize the relationship of subjectivity and objectivity within the person of the investigator. (p 116)

The requirement that the researcher attend to, and take ownership of personal subjective understandings (bracketing) is an important research norm. Some believe that this act allows preconceptions to be suspended (and therefore creating an objective stance) -- allowing closer access to the naive phenomena (Husserl, 1970; Giorgi, 1981); others believe that it reveals the context within which interpretation is and will evolve (Gadamer, 1975; Polkinghorne, 1980, Pershkin, 1985). The honesty of the researcher allows the audience or research consumer to reconstruct relationships and contexts within the investigation; it also immediately involves the researcher in the cyclical nature of reflection and interpretation (to be discussed in detail in a later section).

The researcher's attention then turns to a phenomena itself: first to faithfully record it; then to search for a way of reconstructing the experience so as to capture and communicate its essence. As noted previously, there are many options in documenting and interpreting a phenomena. It is interesting to note that even among qualitative researchers there is considerable controversy regarding the value and

actual performance of these available strategies (Schulman, 1986). It seems in research there are many choices and many defensible positions. To the researcher there can only be one answer to these dilemmas and choices integral to the evolution of a research plan; the nature of the question or roots of the inquiry must guide the nature of the methodology.

There have been some attempts to establish natural science (qualitative) and quantitative modes of inquiry as complementary strategies rather than competitive ones. For example, the argument has been made that implementation of an order of application strategy would allow the researcher to apply the strengths of both paradigms to a research issue. Proponents of the plan suggest that basic science (that achieved through interpretation and reflection) be used initially to establish the direction and focus of experimental applications (Biddle, 1981; Schulman, 1986). When complete, quantitative research strategies would be implemented to establish more definitive results. This may be achievable on a practical level where more value can be placed on the the question and potential uses of the results.

However, attempting to construct the merger at higher theoretical and philosophical levels may be of more questionable value. Maintenance of separate and uncompromising ontological positions has value in the retention of discipline and regulation: the standards of each paradigm are not compromised by each other. Continuation of an opposing and competitive stance in inquiry does

have this one positive aspect; it prevents either strategy from slipping into non-rigorous eclecticism.

It is left therefore to the practical implementor to be honest and reflective about his situation and his needs and to match these with a methodology; both validity and reliability should be ensured. The better informed the practitioner, the wider the range of available options, and hopefully -- the wiser the choices.

Education as a Human Science

> All this has led to a constructive turning away from the goal of 'making good teaching easier' to that of portraying and understanding good teaching in all of its irreducible complexity and difficulty. Quality portraiture may be of more practical and inspirational value than reductionistic analysis and technical prescriptiveness. (Clark, 1986, p. 14)

The mainstream approach to classroom research in education is known as "process-product" research (Dunkin & Biddle, 1974) or teacher effectiveness research. Both terms refer to research which attempts to identify generic characteristics across classrooms and to establish causal linkages between teacher behavior or teaching practices and student achievement (Biddle, 1981; Erickson, 1986; Shavelson,

Webb, & Burstein, 1986; Shulman, 1981, 1986). The basic tenet of this research is:

> to define relationships between what teachers do in the classroom (the process of teaching) and what happens to their students (the products of learning). One product that has received much attention is achievement in the basic skills. ... Research in this tradition assumes that greater knowledge of such relationships will lead to improved instruction; once effective instruction is described, then supposedly programs can be designed to promote those effective practices. (Anderson, Evertson & Brophy, 1979, p. 193.)

The underlying ontology of these studies is based in positivist and rational philosophy: the philosophy of the natural sciences. The studies typify teaching as an aggregate of behavioral skills which are performed by teachers and can therefore be measured. Learning is also viewed as a quantifiable commodity. Research then, is based on establishing the relationship between the two. The popularity of this methodology is related to the expectation that the results will be directly useful to teachers in the classroom. Teachers would be able to make preferential discriminations between one teaching technique or curricula and another. Despite its apparent simplicity, the model promises to eventually define the 'perfect' teacher (one who

implements the correct teaching practices); growth and learning can then be guaranteed for all students.

In reality, the impact of research generated thus far has been minimal considering the amount of research completed. While advocates of the model remain optimistic (Linn, 1986; Saphier, 1982), some results have actually been negative. Perhaps most significant has been the fostering of a clear separation between espoused educational theories-- empirically validated theories -- and "theories in action" -- tacit theories acquired by individuals in actual practice (Brown & McIntyre 1986; Butt & Raymond, 1987; Giroux, 1985a; Hultgren, 1987; Schon,1987; Stenhouse, 1985). Teachers have become increasingly disenchanted with experimentation; research results and their prescriptive applications have not achieved their promises of assuring teachers of teaching success. Teachers increasingly view both the research and the researcher as lacking a base in reality; as inadequately involving actual practitioner in developing research direction; and as assuming a superiority of theory over practical knowledge and experiential learning.

General criticisms of the natural science approach, which are also relevant in this case, are responsible for some of failures with application. While purporting to be bias free the direction of studies undertaken has been heavily influenced by political forces and educational ideals (Biddle,1981). Educational ideals are progressive education theories which inherently contain beliefs about the nature of

optimal teaching practices. Entering research with a predetermined notion of what good education is limits what is observed and what is described; the tendency toward the use of measurement strategies which favor the characteristic being measured has also been noted (Cronbach, 1975).

Also fundamental to the criticisms of empirical research as it relates to classroom practise are:

1. It reduces the complex environment of the classroom to "isolated fragments of reality" (Butt & Raymond, 1987, p. 66). Many other commentaries on education research cite this concern including Amabile (1982), Cronbach (1975), Dewey (1929), and Erickson (1986). The usefulness of empirical research is less the issue of debate than the claims of the generalizable nature of the results. The research context is an extremely reduced view of the classroom; assumptions that experimental results have guaranteed relevancy to the complex real world classroom are inappropriate and are increasingly being challenged. Also of concern are perceived problems which are not addressed because their inherent complexity defies the reductionistic nature of experimental process.

2. It transforms thinking, reflective teachers into powerless technicians (Clandinin, 1986; Clark, 1986; Giroux, 1985a, 1985b; Schon, 1987). In Stenhouse's words (which require no further explanation):

> Now there are many, I imagine, who, like myself, regard teaching as an art in which the teacher's skills are differentially applied as a result of diagnostic interpretation. Teaching is largely a response to the observation and monitoring of learning in cases. If this is so, then a crucial problem of the psycho-statistical paradigm as the design for a discriminant experiment is not simply that it deals in general prescriptions, but that it offers to guide teachers by overriding, rather than by strengthening, their judgement. (1985, p 27)

3. It views teachers as being ultimately responsible for learning in their classrooms; students, for example, are viewed as passive objects -- something to be acted on by teachers (Chamberlin, 1974; Clark, 1986; Fenstermacher, 1986). Other complex variables such as school climate, individual student characteristics, curriculum etc. are not understood as important elements in a formula which is much more complex than a reductionist science can allow. As Chamberlin (1974) summarizes: "Simplistic notions of education as the teaching-learning transaction, of education as schooling, or of education as a measure of national prestige, are helpful neither in planning nor in evaluating what is done in activities called education" (p. 123).

Practical problems have also arisen which are secondary to the dependency on empirical science and to the resulting theory/practice split. Ben-Pertez, Bromme, & Halkes (1986) summarize these as: a)

failures in achieving curriculum changes and improving teaching standards due to the teacher misunderstandings and misinterpretations; b) failures in teachers to retain theoretical understandings acquired during teacher education programs; and c) failures in teacher training which exclusively focus on behavior change and theoretical knowledge.

Many critics of educational research maintain that the persisting belief that education can be theory driven (especially as established by externals) has resulted in an educational crisis (Bellack, 1981; Butt, Raymond, and Yamagishi, 1989; Popkewitz 1984). Most other reviews, while not taking as extreme a stand, now acknowledge and provide a full consideration of alternatives to the orthodox methods of research. These alternative methods are qualitative and are derived from the notions of intentionality and reflectivity discussed previously. The rational for their development has primarily been a defensive one: where empirical science methods failed, alternatives were developed to replace them. However, some of the insights and understandings gained through this critical process are important; some universal pedagogical assumptions were obviously in error.

Education has always been a completely progressive endeavor. Research and policy-making are focused on the future, on what should be; this has been the legacy of the of the positivist philosophy in education. This progressive focus has left the field with meager understandings of what education actually and presently is. Research

resources have not been directed to understanding the phenomena of education; models promising proof of causality and the power of control have lulled educators into believing that grounding or basic science is not necessary. In Chamberlin's words: "The assumption of deductive application in education fails to recognize the absurdity of trying to apply an articulated, carefully developed system of thought to an object that has not been identified, described, or characterized" (1974, p. 134).

Assumptions of how teachers actually master and understand the craft of teaching are also subject to closer examination. Practitioner understanding of education is increasingly felt to be tacit in nature; " It is a pre-theoretical, pre-philosophical understanding, not articulated in conscious thought" (Vandenberg, 1974, p. 190). In a more radical statement Yinger (1987) maintains that:

> learning to think and behave in ways appropriate to the demands of teaching ...Is not really possible until a beginning teacher actually engages in teaching. In fact, the 'language of schooling' these novices have been exposed to and encouraged to use may be in conflict with the actual demands of practice. (p. 493)

Perhaps, because many aspects of teaching are expressions of practical intelligence rather than of conscious and articulated understandings,

the tendency to consider teachers as technicians has developed. Instead of encouraging teachers to develop a reflective stance or to increase their ability to articulate craftsmanship they are encouraged to allow others (externals) to do it for them. As Butt et al. (1988) suggests: "it is useful to view the teacher as being as intentional actor who, with others, creates a cultural and social ecology that shapes and influences particular contexts, events, situations and interactions" (p 102). By creating an expectation for teachers to become more reflective perhaps more essential understandings of the teaching and learning can be achieved. Collaboration and shared meaning can then be created between teachers and researchers so that research and practise become a mutual endeavor rather than separate and disparate forces in education.

While interpretative methodologies provide a means such that the phenomena of education can be described and given meaning; they do not create a new view of education -- they create "the facility for a new way of viewing education" (Chamberlin, 1974, p. 135). They provide a methodology to explore practical understandings of education (such as teachers manifest) from the perspectives of the actors themselves; to create holistic understandings of the complexity of classroom and school environments; and to provide specific understandings of specific phenomena and structures. These are research elements that education has lacked. Failure to explore these

areas has resulted in a narrow perspective of educational events and a lack of basic understandings of the phenomena of education.

The Notion of "Teacher Voice"

The need to have teachers speak of themselves and of their reality as practitioners and participants within pedagogical structures and relationships is consistent with the acceptance of a phenomenological ontology in education. Although this is not the only world-view from which research into teacher understanding and reflection can be developed, it is a frame which is particularly suited to the endeavor. An interpretative method demands grounding, a return to the actual phenomena itself; thus it enables complex, highly individualized phenomena (such as teaching itself) to be understood. In the case of teaching, therefore, it is appropriate to approach teachers themselves, put their stories into words, and create opportunities for them to reflect on their understandings. As Van Manen (1990) summarizes:

> In phenomenological research the emphasis is always on the meaning of lived experience. The point of phenomenological research is to "borrow" other people's experiences and their reflections on their experiences in order to better be able to come to an understanding of the deeper meaning or significance of an

> aspect of human experience. So in the phenomenological investigation of the experience of parenting, we wish to understand what being a parent is like for this or that person as an aspect of his or her life and, therefore, by extension, as an aspect of the possibilities of our being human. (p. 62)

Research into teacher thought has only recently begun to capitalize on phenomenological understandings as a frame to structure investigation. Prior research utilized external constructs to describe the mental lives of teachers and to understand and explain how and why the observable activities of teachers take on the forms and functions they do (Clark & Peterson, 1986). According to Clark (1986) "early research on teacher thinking was justified by claiming that teacher thinking controlled teacher behavior and that teacher behavior was what produced student learning" (p.9).

Few of the approaches developed to meet this objective actually sought the teacher's perspective of classroom reality; many used process/product models to attempt to show how teacher's thoughts and beliefs or decision making capabilities directly affected student achievement. While the awareness of the teacher's role in making and carrying out decisions in an uncertain and complex environment is often expressed, these studies restricted their focus to specific and isolated teacher characteristics (Shavelson & Stern, 1981). The essential

nature of understanding teacher thought was limited to hypothesis testing about teacher's cognitive processes.

Research tools were directed towards the understanding of teacher planning; the description of the thinking teachers do while interacting with students or events that require decision making; or the description of teacher implicit theories and beliefs (especially attributions of students and the causes of their performance). In many cases the focus of the inquiry was on preconceived notions of the importance of certain skills, knowledge, and attitudes in the classroom; the results were related back to constructs of teaching effectiveness. An externally driven model to define ideal educational practice was advocated and maintained.

With evolution and with pressure to establish a consonant relationship between research (educational theory) and practice, methodology has since developed decisively in the direction of interpretative analysis. The research goals in this domain have shifted; Clark (1986) states the developing direction to be " providing the reflectively professional teacher with tools and encouragement to frame and solve his or her own unique professional challenges" (p. 14).

With the introduction of interpretative methodologies new assumptions have been made. A critical underlying premise of current work is described by Elbaz (1983): "teachers hold a complex, practically-oriented set of understandings which they use actively to shape and direct the work of teaching" (p. 3). Research value is now being placed

on the explication of these understandings, even though they are being presented as tacit, non-conscious and non-thematic in nature (Vandenberg, 1974). Different types of teacher behavior are felt to bear evidence of these understandings; a range of strategies have evolved to elicit and clarify them.

Clark & Peterson (1986) and Clandinin & Connelly (1986) provide comprehensive reviews of the current research on teachers' thought processes. Their summaries of applied methodologies and research goals indicate that distinctions between empirical and interpretative research are becoming increasingly problematic. Many current studies incorporate aspects of both paradigms in their overall designs; similar terminology is used by both even though the actual references or philosophical understandings appear to be quite different. Theoretical and methodological bias is evident in both paradigms and the desire to interpret data in terms of teaching effectiveness remains dominant. Even for the reviewers bias is evident; studies are valued by reviewers in accordance with their relation to the belief system of the reviewer. As yet there are few grounds from which substantive statements regarding the relative values of different strategies can be made. Both reviews expressed the positive aspects of the field's responsiveness to new ideas and evolving understandings; also apparent were equivocal feelings created by the diversity of designs, the lack of standardization of terminology, and inherent philosophical differences.

Some of the methods of inquiry which have been used to investigate teacher implicit thinking and understanding have included:

1. Thinking aloud - teachers verbalize their thoughts while performing a task.

2. Simulated recall - a recording of a teaching episode is replayed as a recall cue for teachers.

3. Policy capturing - printed descriptions of students or hypothetical teaching situations are provided which teachers rank, sort or react to.

4. Journal keeping - teachers keep ongoing anecdotal written accounts of their experiences and thoughts.

5. Repertory Grid Technique - this method is based on Kelly's personal construct theory (Kelly, 1955) and his method of discovering personal constructs.

6. Participant Observation - a field work strategy in which the researcher works actively within the classroom while simultaneously making observations.

7. Interviews (Clinical, Structured or Conversational) - Teachers express their beliefs verbally in an interaction with the researcher.

These methodologies seek to allow the researcher a view of the complex world of the classroom, a view of the "many competing influences, dilemmas, paradoxes and contradictions" (Butt &

Raymond, 1987, p. 72). However they vary greatly in the extent to which they return to an actual phenomena and to the extent that meaningfulness, as experienced by the key participant -- the teacher -- is developed. Different researchers, attempting to explore this domain, have conceptualized teacher constructs in different ways, making it challenging to develop a summative picture of the knowledge gained.

Clandinin (1986) differentiates two types of research in teacher thought as: (a) "research adopting a theoretical researcher's perspective" and (b) "research adopting a teacher's practitioner perspective" (p. 10). Clark and Peterson (1986) make a similar differentiation by indicating that the findings of the second type make sense only "in relation to the psychological context in which the teacher plans and decides" (p. 285). The results obtained are not to develop a prescriptive or evaluative formula for educational improvement; rather it is oriented to obtaining understandings of how teacher's themselves construct and assign significance and meaning within their personal contexts.

The emphasis in this latter sense of researching teacher thought remains focused upon the evolution of methodology. Interpretative methodology and the phenomenological perspective provide a relatively clear mandate for process; the alignment of specific research questions with appropriate methodology requires a return to this basic philosophical position.

The identification of critical components in methodology requires several considerations. Butt and Raymond (1987) refer to "teacher's voice" as the essential perspective which must be included in research purporting to reveal understandings of teacher's actual experiences and knowledge. In their words:

> The notion of teacher's voice is important in that it carries the tone, the language, the quality, the feelings that are conveyed by the way a teacher speaks or writes. In a political sense, the notion of teacher's voice addresses the right to speak and be represented. (Butt et al., 1988, p. 96)

Teacher's voice can be elicited in a variety of forms ranging from diaries to interview formats.

The assumption that teachers can move easily beyond espoused and technically acceptable expressions of understanding and express more personal reflections has been challenged by several researchers (Brown & McIntyre, 1986; Clandinin, 1986). A basic and essential requirement from Clark's and Peterson's (1986) viewpoint is that the methodology and the researcher actually assist the teacher in moving from an implicit and private belief system to an explicit description. Research plans must therefore included some type of strategy to facilitate this progression. The use of extended personal biography (Butt & Raymond. 1987); encouragement of teacher images --

metaphors, anecdotal accounts, visual images etc. (Clandinin, 1986); involvement in hermenutic interpretations (Hultgren, 1987); and confirmation via participant observations (Brown & McIntyre, 1986) have been suggested.

Finally, the sense that the researcher and the teacher have cooperated in the creation of the text is important. The final sense of understanding is a collaborative effort with the meanings, understandings and experiences of both integrated -- interpretation and articulation of the essence of the experience is achieved through an ongoing dialogue. Therefore the intent and personhood of the researcher must be as evident as the characteristics and individuality of the co-researchers.

Understanding the Act of Interpretation

> The circularity of the hermeneutic endeavor is not vicious in that it involves a passage from a vague preconceptual understanding of the meaning of the phenomena to the explicit seizure of its meaning. There is no entrance to the hermeneutic circle, no begining point. The psychological investigator must "leap" into the circle in order to elucidate it. (Titleman, 1979, p. 187)

As long as there have been symbols there has been a need for interpretation. Symbols are the medium through which meaning, no longer present to the senses, can be recreated, reexperienced, and shared; they constitute the matter that we recognize as thought; they are the tools which allow invention and innovation yet often predetermine the ways we experience the external world.

The inherent complexity of symbols comes in part from an inherent dual nature. A symbol is both personal and universal; via symbols "a child acquires a unique self and a shared world" (Bain, 1987, p. 276). Symbols are initially acquired through interactive experiences. Meaning can not be supplied directly it must be acquired experientially. The child develops into a symbol user by participating in experiences in which significant others are using symbols. The meanings that the child discovers are unique because of his personal involvement with them; shared because the context that presents the symbol is a social one.

It is as result of the dual nature of symbols that interpretive acts are required. Interpretation is the act of trying to make clear the meaning expressed through symbols. If symbols functioned exclusively for social purposes there would be no need for interpretation -- meaning would be absolute. Conversely with only individualized meanings there is no reason to establish communication or dialogues. With both possibilities operative, symbol users must become actively involved in the formation of

meaning through symbol selection and arrangement; comprehension of meaning emerges through an analysis of the expression. Both are acts of interpretation (Ricoeur, 1981).

During many conversations and respondent interactions with word symbols (i.e. reading, listening), the act of interpretation requires little effort; sufficient understandings and meanings are absorbed from a single contextual presentation. A personal sense of the meaning is created; a lifetime of listening, learning, and internalizing words predisposes the nature and organization of that meaning.

Not all symbols share sufficient common understandings to allow easy and rapid interpretation. Symbols vary in their degree of formalism and the type of meanings they stand for (i.e. factual vs. affectively based); different levels of interpretation are required for different purposes.

Words are the medium by which most interpretation is achieved; words are also the reason that acts of interpretation are required. The interaction between words and meaning is perhaps more complex than it is for any other symbolic medium. Words can lead meaning by predisposing attention, focus, and understanding -- predetermining what can be gained from an experience. Words can follow after an experience and provide the medium through which the isolation of personal reality and understanding is broken and becomes shared.

At its best the act of interpretation becomes a subjective dialogue: an ongoing exchange between the interpreter and that which is to be interpreted. Meaning is proposed, tested against the object of interpretation, and refined by new insights and clarifications. A shared symbol system forms the common ground through and within which this meaning is negotiated.

Modern hermeneutics, the philosophy of interpretation (Bleicher, 1980), represents the formalization and development of a theoretical understanding of interpretative acts. Originally deemed necessary to create a contraposition to the positivist culture, it occupied and fulfilled a similar place and function to that of the qualitative research paradigms (Oh, 1986). It created a value for meaning and understanding that was fluid, individualized, and uniquely human. Hermeneutics allows human meaning and interpretative acts to to be explored, not as absolutes, but as a characteristic range of possibilities (Heidegger, 1962).

According to Gadamer (1975) the act of interpretation is a fusion; it reflects as much of the interpreter as it does that which is being interpreted. Interpretation is an act of living within a particular context and bringing that knowing to bear on new text. It is also an act of hearing the context of the other; it requires knowing about, but moving beyond the knowledge of self, to assimilate the sense of the other.

Heidegger (1962) described this process as circular; each understanding creates predictions of the full meaning. These predictions become hypothesis which are revised or discarded as the interpretation continues, as new insights solidify and become understandings, and as more of the whole is grasped. Interpretation is an ongoing active anticipation of meaning within the text. Beliefs about meaning are projected onto the text and through thoughtful consideration of both affirming and disaffirming evidence a new, more complete construct is built. This circularity exists when an understanding of a part of the text interacts with an understanding of the whole as well as when an understanding from outside the text (i.e. personal knowledge and experience) interacts with the text.

These understandings of interpretation are not unique to hermeneutics. Aesthetics, which deals with the interpretation of things with aesthetic value, supports similar processes of interpretation. Within aesthetics there is also a strong conceptualization of the expressive aspect of interpretation. Here again a dialogue is formed -- this time between a creator and his product.

Interpretation, then, is first and foremost active involvement. It is a constructive stance that deals with the inherent difficulties associated with meaning transformations by becoming involved with the meaning directly. To undertake interpretation is to seek coherence and meaning. There can be many understandings and many

meanings; as long as each creates coherency and make sense of the object of their intentions they have value.

Chapter 3: The Circle of Discovery

Developing a Sense of Purpose

The domain of inquiry into teacher thought is one that presents multiple possibilities. The concepts I have been addressing such as "teaching artistry", "tacit teacher knowledge", and "personal practical knowledge" encompass a vast array of understandings and experiences for teachers. To choose to research these phenomena requires choices: the establishment of limits as to what phenomena and experiences can be covered without compromising thoroughness; the selection of a methodology depending upon the scope of the inquiry and the depth of reflection desired; and the development of interpretative and reporting strategies. None of the considerations or choices are dictated. The very flexibility of the field turns it simultaneously into a creative but also into a risk-taking endeavor.

In stating my purposes I acknowledge the "pilot" aspects of the focus of the inquiry as well as the "pilot" aspects of the methodology adopted. I have changed a great deal in the course of this research. The questions I would ask of teachers are becoming broader based; as my awareness of how restricted I have been in the past grows, so has my desire to expand the field of inquiry. Similarly, as I have acquired confidence and experience with the

methodology, the desire to expand, alter, and fine-tune the strategies implemented has grown. What could be incorporated without compromising the basic nature of the inquiry was -- what could not will have to be saved for another time. The emphasis of this research project was understanding; I have kept this purpose foremost in my mind throughout.

An investigation into teacher thought also creates personal and professional obligations directed at documentation and accountability. Numerous alternate ways of defining and researching this broad concept exist; assumptions of shared understandings and universal definitions can not be made. These must therefore be made explicit. Attention to and evaluation of methodological considerations is also a focus as this area of research struggles to make individual research results comprehensible with the field as a whole.

I have therefore two agendas which I have attempted to address in completing this research. They are:

1. To develop a methodology which would allow teachers to reflect on an educational event in such a way that they remain true to their implicit and practical understandings of pedagogy.

2. To create a phenomenological understanding of how teachers experience and create meaning from the learning changes their students experience. Empirical research in education is heavily committed to establishing causal relationships between

teacher behavior and learning in students; my intention is to allow a different perspective of this phenomena to be expressed.

In summary (as these have been expressed in detail elsewhere in this paper), the choices I have made in developing both the question and methodology are:

1. That a phenomenological perspective or approach to inquiry has been chosen. The rational for this is multifold. First, the nature of the question as formulated is phenomenological: it seeks to describe the lived experiences of certain persons deeply involved in a certain phenomena. The goal is to look at the event holistically, allowing significance to emerge rather than predetermining what is attended to. Second, because of my background and experiences I can not remain detached from the subject. I wish to experience the research process as an opportunity for personal discovery and exploration in a way that is integral with the opportunity to develop an understanding of the phenomena itself. Finally, I wish to continue to build in the direction that research on teacher thought has already established. Understanding and eliciting tacit knowledge and reflection -- attempting to understand the metaphor of teaching as artistry -- is a young science. As such, the studies that have presumed little and have embraced the complexity of the task through qualitative research have been the most productive. It is on this body of research that this present study is based.

2. The options for specific inquiry strategies in an investigation of teacher thought are vast. Alternatives such as developing intensive and holistic perspectives from a single teacher or eliciting more focused understandings from a group of teachers can be considered. The interpretation can be based in teachers narratives or alternatively based in or supplemented by observation, simulated recall, and ethnography or field work practices.

Heavily influenced by my prior experiences in education the focus of the question I have established is specific in nature. Throughout the course of inquiry hidden biases and unnecessary restrictions surfaced allowing expansion and reformulation of this focus, however, much of the original flavor remains. A small group of teachers are utilized to explore this selected phenomena; the number determined by a desire to explicate the individual perspective as well as to allow any sense of unifying understandings to emerge. Two similar but strategically different types of narrative are elicited during participant interviews. The first is anecdotal narration, serving two functions. An anecdote is a non-interpreted recollection of a phenomena; potentially it is a rich and relevant perspective of the experience. Use of the anecdote also allowed a focal point to be established from which teacher reflections and interpretations could be elicited. This second stage of narrative was

formed by teacher interpretations, reflections, and generalizations based on the recollections generated in the first stage.

3. The interpretative base of this study is hermeneutic. From the protocols (interview transcriptions) and actual recordings, meaning units were identified, organized, and summarized. The interpretation of the teachers' words are reconstructed into an understanding of the essences of phenomena under investigation and presented in this written text so they can be shared.

In the context of this study the term teaching artistry is used to create a metaphor to deepen understandings of teaching knowledge which is difficult for teachers to access consciously but which is believed to govern teaching behavior in active practice situations. Its function is separate from, but not exclusive of, more conscious forms of reflection and thoughtfulness associated with teacher planning.

Introducing the Co-Researchers

Five teachers were invited to participate as co-researchers. The invitations to participate were made instinctively; only after reflection was the selection criteria, which had been unconsciously adopted, made clear. All of the teachers were individuals that knew me in the role of consultant. Two, I had shared an office with as a

part of a consulting team which served a major urban school board as well as numerous remote, rural school boards. The other three were teachers that I was currently working with in a smaller rural school board. All of the participants were currently active in teaching; those that had been in consulting positions had returned to classroom settings. I was familiar with the work of all these teachers.

In exploring my interpretations of their work and the quality of my interactions with them, several key areas of commonality emerged. They were all strong, competent teachers -- clearly manifesting those teaching behaviors, characteristics, and results that I have come to call "teaching artistry". They all communicated to me a great passion for education, manifesting their feelings by the expression in their eyes, the emphasis in their voices, and by the tremendous energy they projected physically. These characteristics were as evident in their classrooms during instruction as they were during more abstract conversations about education.

They were all teachers that I have felt comfortable with from the time I first met them. I have always found it easy to be honest with them; our habits in interaction have always been more cooperative than directive and more personal than formalized. Each also had extensive experience with exceptional students; they knew the struggle to achieve gains in instances where progress could not be predicted given the notions of normal or average.

These teachers were the standards upon which my notions of teacher competency were constructed. They were personalizations of what I believe to be good about education; they are my metaphors for "teaching art". These teachers were knowable by me: I believed what they believed about education and I worked well with them. Inviting them to participate was in many respects self-validating.

While there was consistency related to how I viewed these teachers, there were also many individual differences, some of which can be documented in short biographies. These biographies do not assume to communicate the personhood of these teachers rather they are intended to act as brief vitas of both their experiences and contributions in education.

HONOR is a dramatic, passionate teacher with educational experience at the early childhood, elementary, and junior high levels. The bulk of her experience, a total of 10 years, has been in the classroom. Other experiences have included semi-administrative, supervisory, and consultant positions. Honor recently completed a master's degree in education, with a specialization in the education of exceptional students.

Honor resides in a small community and has remained with the same school board since she began teaching. She was instrumental in facilitating her school board's eventual adoption of a policy for inclusive schooling. The policy guaranteed full inclusion of all disadvantaged learners into their local schools and

into age-appropriate regular classrooms. Honor maintains this commitment to integration within the greater community as well. During the course of this study Honor was supervising the programs of students who's family's had elected home schooling over traditional classroom education.

JOAN is an immensely personable teacher who laughs easily and communicates warmth and concern. She has held a variety of elementary teaching positions; most recently she has been working with classroom teachers to facilitate the integration of exceptional students into regular classrooms.

Joan has a particular interest and expertise in experientially based and cooperative learning environments. Personally she likes a challenge and values the opportunity to work with other teachers, as a colleague, and when appropriate as a mentor.

Joan has taught for two school boards, one urban and one rural, in the 15 years since she finished her education degree.

ROB has been teaching elementary school for three years and already is very distinctive in his educational approach. His classroom abounds with creativity and artistry, largely managed on a project basis. Rob communicates a great deal of gentleness but often appears less confident than his degree of classroom risk-taking and his expression of his pedagogical beliefs would indicate.

Prior to his present assignment, a split grade 3/4 classroom in a rural community school, he taught in a remote and isolated northern community.

BONNIE's background and teaching history was perhaps the most varied of the five teachers participating. She initially taught physical education, later developing a specialization as a teacher of the learning impaired. Her master's degree was completed in speech-language pathology, the area she later became a consultant in. Most recently, she has returned to teaching -- once again a specialist teacher for the hearing impaired. Her experience has been primarily within a large urban center but her work as a consultant required travel for very remote and rural centers in the province.

Bonnie's teaching career has spanned more than 25 years. Exceptionally expressive, and possessing a deep sense of personal confidence, she is also well known for her sense of humor and love of adventure.

DIANE also began her teaching career, which has spanned 10 years, in physical education. She followed with a master's degree in Educational Psychology and consulted for several years with the same school board as Bonnie. She has since returned to regular classroom instruction (grade 1) and is following a growing interest in administration and curriculum development.

Diane has also traveled extensively as a consultant, bringing energy and hopefulness to tough educational situations. Her belief in the rights of the individual student are absolute; advocacy for disadvantaged learners has been a major role of hers.

As can be seen, the teachers involved in this study vary on many different parameters. Age, years and variety of experience, educational level, and personality factors such as degree of teaching confidence and verbal expressiveness were all parameters of variability. Diversity was apparent in background, in teaching experiences and in their expressions of individuality; similarity was apparent, at least in my belief, in their ability to achieve teaching artistry.

The Fashioning of a Question

At the inception of this research project, I could not have predicted how interwoven the understanding of a question, the development of a methodology, and the assumption of active involvement would be. The hermeneutic circle, a method of interpretation in which understanding evolves reciprocally and mutually between the sense of the whole and the sense of the component parts, provides a good metaphor for this experience.

My initial question was very focused; I wished to ask: "How do teachers optimize their role as mediators or agents of change to their students?" The question arose directly out of my experience and role with teachers as well as out of a long acculturation in process-product research. The role of teachers was to "teach"; my role was to teach them to teach better. At least, that is where I started.

Arising out of my initial question my goal became to develop a taxonomy from which teachers could select and rank their choices of effective teaching strategies. My intent was to examine the results for significance. My realization that I could not create personal and experiential criteria for the inclusion or exclusion of strategies; that I was trapped by the proliferation of "trendy techniques" which were currently in research vogue; that I could not easily describe and include practical, common, or totally innovative strategies that did not have standardized labels, trivialized what I was planning. With so many restrictions the research became personally empty -- it was reduced to an exercise of technical mastery.

Qualitative research strategies, in particular phenomenological research, provided the hope that meaningfulness could be restored. I could go directly to teachers and ask them about their lived experiences and understandings of creating change (or learning) in students. Meaning could develop

from the teachers sense of valuation; this was a point of view vastly more interesting than the perspective of technically dictated significance.

The adoption of a phenomenological perspective requires a period of self-reflection to "bracket" presuppositions and preconceptions. This I initiated through personal reflection and through the experience of feelings of resonance with the reflections of others. However, with each articulation of my understandings I became aware of more layers of uncertainty; I lost my sense of sûrety. The act of inquiry became a process of discovery: the search for understanding was as much a part of formulating the question as it was interpreting the answers. This was the personal quest I shared in the initiation of this inquiry.

I initiated my first interviews; I read further, exploring and absorbing the philosophy that grounded my research methodology. I continued to uncover and clarify my presuppositions and biases. I discovered I did not completely support the notion that technical tools were exclusively responsible for quality educational experiences; promoting the notion maintained the illusion that educational experiences and outcomes could be predicted. Interaction with the teachers revealed the deeper version of the same prejudice: teachers were fully accountable for the knowledge and skill growth that their learners experienced. My deepest notions of pedagogy contained powerful elements of cause and

effect and assumptions of the inequality of the student and teacher dyad.

In my attempts to phrase the initial question and conduct the data collection interviews with teachers, this assumption is never totally suspended. However its revelation and subsequent internalization changed the essence of the focus of discovery and had a significant impact on the eventual understanding of the text. In some fascinating way the teachers involved seemed to grasp the nature of the real question -- for this was the question they most often seemed to answer.

My final statement of the question hence becomes two-fold:

1. What is the lived experience of teachers when learners experience change (i.e. learn) in educational settings?

2. What significance and understandings do teachers place on and have with these change experiences?

The Interview Process

The participants were invited to become involved in the research process but were initially given only a vague idea of the specific focus. Given the highly conscientious nature of all of the subjects it was feared that knowing the focus in advance would pressure them to prepare a formalized, theoretically grounded reply rather than one that was cued by their own experiences and actions.

The fact that they would be interviewed and that the interviews would be audiotaped and transcribed was clarified; the appropriate permission and releases were then obtained.

Once the the participants had agreed to share their teaching insights, interviews were scheduled. Each interview was scheduled at a time and location convenient to the teacher; complete privacy during the interviews was assured. The first of the interviews was completed in January -- the last in May. Even though there was no intention to standardize time the interviews each lasted approximately an hour and a half. While each interview was unique, closure seemed to occur naturally within the same time frame. The interviews were audiotaped and transcribed verbatim. While the transcriptions formed the substantial body of data to be interpreted, the audio recordings themselves were utilized to ensure that meaning created through tone of voice, pauses, and hesitations was not lost.

Once the transcriptions were completed they were returned to the participants for review. The co-researchers were encouraged to add, delete, or clarify material as they saw fit. They were encouraged to attend to the meaning of what they had said, to seek resonance (an agreement with the tone as well as the content of what was said) and to change what did not fit with their active belief systems. Very few modifications were requested; those that were

tended to be to responses to interview questions that had been leading or directive rather than facilitatory.

As noted previously two types of data were elicited in the interviews. Lived-experience material, in the form of anecdotes and recollections of experiences, was elicited initially and at various points in the interview. The teachers were given reflection time to re-create actual experiences with as much detail as possible. In all cases teachers were asked to re-create an experience in which they had witnessed a learning change occur in a student they were teaching. Images, metaphors, and descriptive statements such as "the light goes on", "Eureka","it clicks", were utilized to assist the teacher in understanding exactly the kind of moment I wished them to focus on.

Based on this experience a hermeneutic interview was encouraged. A hermeneutic interview is one where the interviewees become active in reflecting on and interpreting their own experiences (van Manen, 1990). A cycle consisting of the alteration of lived experiences stories with an opportunity for reflection and interpretation was constructed in each of the interviews.

As interviewer I encouraged the development and use of the cycles to involve the teachers in discovery leading to deeper understandings of the phenomena. While I initially conceived the interviewer's role as being restricted to passive facilitation and

summation I found that in actuality I was active in the process of discovery along with the teachers. At times it seemed that more than an objective facilitator was needed; an active dialogue was necessary to bring the understandings to a point of articulation and agreed understanding that was satisfying to the teacher involved.

All teachers reported that the interview had been a satisfying experience related to the self-learning and personal expression that was involved. The teachers appeared to understand and feel comfortable with the concept that their reflections would not be portrayed as absolute static meanings; the intent was to capture their present insights, knowing full well that even the act of conscious reflection would cause them to change and develop. Indeed several teachers commented that the reflections had not stopped at the close of the interview but had been an active part of their consciousness while later working with their students. The act of formulating their present understandings had acted as a catalyst to review and reconsider their actions and understandings in the classroom.

The Act of Interpretation

> When teachers speak of their daily practice, they tend to do so at the hand of anecdotes. I am tempted to suggest that among teachers,...anecdote is the natural way by which particular concerns of educating and living with children are brought to

> awareness. Better yet, anecdotal narrative allows the person to reflect in a concrete way on experience and thus appropriate that experience....Thus the act of *anecdoting* as concrete reflecting prepares the space for hermeneutic reflection and understanding. (van Manen, 1989, p. 232)

The determination of significance in the texts, (both verbal and transcribed) as provided by the cooperating teachers, required an act of interpretation. Interpretation is not an isolated objective process; there are a multitude of factors and relationships which are brought to bear on how it is carried out and on what the outcomes will be. Perhaps the most obvious was the interview plan itself which did not isolate interpretation from the description of lived experience. Thus the teachers themselves became active interpreters of the significance of their own experiences. Their interpretations were necessarily deeply influenced by personal histories and present realities.

The articulation of their experiences and reflections was achieved in a conversational interview; meaning was co-constructed and necessarily evolved to a point of mutual understanding. The interpretation of the teachers was influenced and modified by interaction with myself. As I have noted previously my own agenda and understandings evolved over the

course of the research; the influence was therefore different for each teacher and for each stage of review.

The transcriptions of the interviews were also organized and reviewed in a systematic fashion. The goal of the analysis was to identify common meanings across the descriptions and reflections and transform them into linguistically accessible understandings. Interpretation of the anecdotes involved analysis which: a) provided a line by line review of the text to determine what each sentence or idea cluster revealed about the nature of the lived experience of teaching and observing learning changes in students; b) developed summary themes from the individual samples to account for similarities in the experiences of the teachers; and c) developed a wholistic or setentious understanding which spoke to my need for the creation of understandings around teacher's constructs of significance.

The reflections of the teachers were also summarized. Teacher comments and insights were scrutinized to determine how they related to the central focus of the study: the understanding of student learning changes from the teacher's perspective. Again individual samples were developed and then compiled with other summaries to establish a single text. The goal of this last phase was to trace universal understandings or ways of understanding this phenomena.

My ability to trace, schematize, and articulate the teacher dialogues was influenced by many things. Procedurally I drew upon the methodology of hermeneutic phenomenology as exemplified by Clandinin (1986); Colaizzi (1973); Elbaz (1983); Sellick (1989); and van Manen (1990); thematically upon my own personal practical knowledge, theoretical readings, discussions with peers, and discussion and review with the teachers themselves. The act of interpretation was an experience in itself -- again the hermeneutic circle provides the best way of expressing this phenomenum. Constant movement occurred between the understanding of the parts with the understandings of the whole; illumination of one aspect lead to illumination of other aspects, which returned me to the initial point with further considerations. The validity of the interpretation is held in the accurateness with which the participating teachers felt the summaries captured their experiences and the ease with which the reader can identify with the sense-making and creation of coherency that the explanation provides. A belief in and a desire for determinate meanings and correct interpretations is inappropriate and inconsistent with the fundamental goals of this inquiry. These are my understandings and my interpretation of the teachers' understandings.

Chapter 4: Bearing Witness to Change

The Nature of the Text

At the start of each interview the participants were asked to recreate an experience in which they had observed one of their students "learn" something. They were asked to share this experience in as much detail as possible, recalling the complete context, interaction, and task as well as the achievement. Time was provided to identify and recreate the experience; participants were encouraged to utilize visualization and imagery strategies to facilitate recall and retelling.

Further anecdotes were collected during the course of the interview to re-establish mutual reference points, to provide teachers with a basis of comparison, and to develop a broader perspective. Most of these were elicited in the same fashion as the first one; a few were volunteered spontaneously to illustrate or exemplify a particular meaning the teacher wished to communicate. Each teacher contributed on the average of three stories -- some as many as five. These anecdotal stories were identified and separated out from the body of the narratives.

Diversity was apparent in the nature of the stories themselves and in how the stories were told. A large range of learning situations were evident although individual experiences with students (one on one teaching or tutoring) were more frequently cited than classroom

based or group experiences. Students with serious learning problems were also referred to more frequently; the problems noted tended to be extreme and unusually severe rather than typical of most classroom situations.

As concrete examples of the experience of teachers these anecdotes were felt to have value beyond stimulating reflection regarding teacher craft. In themselves they represented a way of sharing "fundamental insights or truths...tested for their value in the contingent world of everyday experience" (van Manen, 1989, p. 247). Looking at the anecdotes as an independent text allowed a sense of the experience itself to be developed; thus the phenomena itself and the reflections which follow can be viewed as having complementary but unique meaning. The anecdotes were understood as expressions of universal experience: they transcended the individual differences inherent in each of the participants. Thus this interpretation reflects these fundamental or essential understandings -- the common expressions of experience -- that occurred across co-researchers.

Initially an assumption was made that understanding -- and therefore interpretation -- would be best achieved through a hierarchical examination of the text. First individual summaries would be developed into theme units; next essential or universal themes would be identified; and finally the essential similarities between co-researchers would be drawn out and explicated. The

establishment of the essence of the experience would be evolved from the grounding of the interpretations of individual experience.

The actual act of interpretation conformed to this sequence only in an abstract sense. In actuality understanding developed simultaneously at all levels. It was impossible to restrain insights, reactions, and the formulation of generalizing statements; the clarity and power of the text reacting with -- and in opposition to -- my own experiences and understandings prohibited a rigid and cautious approach. Pursuit of understanding also extended beyond the literal words of the teachers. All of the anecdotes contained allusions to fundamental experiences of humanness and pedagogy; these were strong and consistent yet often implied rather than explicitly stated. As they were understood they were built into the interpretations which follow.

The understandings that unfolded contained both revelations of new meanings and confirmations of expected meanings. The real world of teachers is richer and contains much more depth than the objectified world constructed by science and technology, yet, these worlds were not excluded or ignored. The stories documented an experience but also bore witness to the intensely personal and emotional context that teaching and learning actually occurs within. These particular stories were happy ones: the anecdotes are joyous and uplifting. Their tone is positive and victorious; the attitude is contagious. These things also are reflected in the interpretation.

Teachers as Spectators of Change

> And then finally, he hit the button arbitrarily. (and) The flower that he had drawn on paper to match the computer pattern came up on the computer. (and) It was like watching a sunrise. He straightened up. He looked at the paper. He looked at the flower on the screen. He beamed from ear to ear. (and) This little red glow started from his neck and went right up to the roots of his hair and these eyes, like little saucers, and this beady little grin. (and) He looked at me and he didn't say a word. He looked back at the computer. He punched another button and he saw the second part of a pattern come up. He looked at his paper and he looked at the pattern; it wasn't the same one. He tried another symbol; it wasn't the right one. The third one he tried; it was the right one. And that's all. From then on he just went until he solved the ritual. Without a word from me. (Just) This incredibly little bent over body that had had enough of everything just unfolded and beamed. He knew what he was supposed to do. Of course, he had a rather larger sun beside him, also beaming. It was just fantastic! (Bonnie)

Teachers don't always have an opportunity to observe and participate fully in the actual moments of learning and change that their students experience; the pace within the classroom and the multiple demands on attention provide fierce competition for a teacher's time and resources. When they do have the opportunity -- if the responses of these participants are any indication -- these moments can be of immense impact. The telling of these stories was accompanied by deep emotional expressiveness; feelings were communicated through smiles and laughter; quiet, intense glances;

dramatic use of their voices; and wild gestures of arms and bodies. The co-researchers became totally involved in the reported experiences, reacting with their emotions, their minds, and their bodies.

Understandings of these teaching moments can be constructed in many ways. There are considerations such as the role of teachers in creating learning moments; the ways teachers construct attributions of their own value; and consistencies in teacher behavior as students approach and begin to resolve learning problems. There are understandings related to the passages teachers attribute to students as they experience learning and insights regarding the short and long term implications to the students themselves. All of these are true and valid meanings embedded in the phenomena and reported by teachers involved in the experience. They are necessary -- yet painfully inadequate at capturing an experience that was described with such passion and pleasure by the co-researchers.

Their experience was first and foremost affective: an emotional touch that reached inside and demanded reciprocity of expression. It was sympathetic: the teacher/student dyad reflected bonding, intimacy, and mimicry. It was energizing: both students and teachers were enabled to act with courage and to take risks. These are the understandings which must come first in order for the pragmatic aspects of the experience to assume a reasonable perspective.

Joan talked about the experience as one which "made me feel really good"; another experience of hers resulted in the comment "I

was really excited for him". Rob talked about one of his experiences as being "a light as much for me as it was for him". On another occasion his comment communicated the same sense of satisfaction as Joan's comments had -- "and then boy we knew we had it and that was a nice feeling.'" Diane and Bonnie spoke more dramatically:

> And you can't imagine the way I was feeling. Like I was jumping up and down on the couch going: 'He gets it! He gets it!' - Diane

> It sure does matter to me. My immediate reaction is extremely physical, extremely vocal. Were it feasible, I would probably dance on the table. - Bonnie

These reactions to and about the experience speak directly to the significance that can be attached to the encounter. Honor directly identifies one of her experiences as being transforming and as having a permanent impact.

> "What happened was -- this was probably May last year -- year before actually, because I remember that it had real impact upon me as a teacher...He was growing and I was really, really proud of him and really feeling good about myself, not that I had something to do with it but that I was there to share it with him."

The significance of the experience becomes even more poignant as even she seems surprised by how long ago it occurred. Her recollection is fresh; it is as real to her now as it was when it actually occurred. This was true of several of the stories that were told. They seemed to have

been recent but in fact were several years old. Apparently these events can fulfill important functions to the teacher; they interact with understandings of self as much as they provide emotional encouragement and performance feedback.

As will be seen in Chapter 5, the co-researchers construct different explanations to account for and understand the meaning of this experience. Individual teachers appear to sense-make or formulate attributions related to this phenomena in highly personal ways. They describe them from within preexisting frames which structure global understandings of who they are and how and why they act. There are aspects of this phenomena which are not separable from how a sense of self is constructed and eventually validated.

The establishment and acceptance that the phenomena resides within this larger context frees the interpretation from simplistic descriptions. For me it allowed the following themes and understandings to emerge and become meaningful.

The creation of the dyad. The stories told occurred in a variety of learning contexts, some of which involved large numbers of students simultaneously. Each story was about a special interaction; regardless of context, the sense of a singular relationship between the teacher and student was communicated. The teacher typically reported initiating an interaction to which the student responded positively. By unspoken, but apparently mutual, agreement an interactive dyad was

formed -- separate and unique from all other partnerships the teacher might form in the course of teaching. Some of the dyads developed quickly and were maintained only for a short period; others developed and lasted over longer periods of time. Each of these interactions culminated in an experiences which formed the nuclei of the stories they told.

The mature dyad's principal characteristics were dynamic: interactions were initiated and maintained reciprocally through turn-taking and shared responsibility; the agenda and direction of the interaction was determined mutually -- there was no clear leader or follower. In this story Diane is speaking of an interaction with an autistic child who was placed in her grade one classroom. The essence of the dyad is portrayed -- its development and its characteristic dialogue are almost metaphoric: so clearly does it illustrate the evolving turn-taking and shared activity that all the participants referred to.

> I was just kind of rubbing the palm of his hand like this and he stopped [the student was absorbed in his own self-stimulatory behavior], and he looked at my hand and then I started rubbing again. And I stopped and he looked at my arm and then I started rubbing again. And he stopped and I stopped and he looked at sort of my upper body, my trunk, and then I started rubbing my fingers on his hand again. And then he looked at my face and he looked into my eyes and he smiled.

Frequently the development of the shared action within the dyad relationship was signaled by a shift from "I" statements to "we" statements. In this example Bonnie is working with a student solving a pattern problem on the computer. Understanding the problem shifted from a teacher responsibility to a dyad responsibility.

> It seemed so simple and so straightforward. I just could not think of any way that I could make it more clear than I had; it was just so obvious! But not to him -- absolutely no idea what to do.
>
> ...Then we wrote the symbols down and we wrote the parts of the pattern out that he had seen. We copied it the best we could. And we went through it on paper. If we put this pattern, it meant this and this and this...we had to experiment; we had to revise; we had to make guesses; we had to predict.

Joan, when describing the activities leading up to student's sudden discovery of his own mastery, also spoke of "we" activities. "We had gone through a little bit of touch-math practise...we were starting regrouping with the tens blocks." Honor described a shared negotiation when she said "We decided that we would invite his mother in to see the room."

The dyad perspective appeared to facilitate flexibility in teacher actions and decision making. The interactions, as has been noted, were actually dialogues; teachers initiated and maintained the dialogues

through their words and actions as learners gradually evolved into full conversational partners.

With a heightened sensitivity to the turn-taking nature of the interaction teachers used a range of strategies to fulfill and facilitate turns. The teachers appeared to need to be the more adaptable of the pair as the needs of the student dictated the medium of the exchange. Honor summarizes this understanding:

> "If you really know the kid and you know what he knows, that you're probably able to effectively build that bridge for him because you're using the same language, the same terms, you're using metaphors that they understand to get across the bridge."

The mode of communication during turns was not necessarily linguistic; spoken words appeared to be only one of many alternatives. The choice of the medium of exchange was, as Honor said, based in an understanding of the child. Frequently elements of nonverbal, contextually based communication (i.e. demonstration, eye gaze, touch) were noted. For example Diane's description of her interaction with the autistic child demonstrated communication and interaction which was developed exclusively through the medium of touch. Bonnie spoke of a situation in which she maintained the dialogue through her own energy and her ability to amuse the student. The student responded in turn with his attention, cooperation, and enjoyment. As his partnership in the interaction became established his spontaneous demonstration of mastery became possible.

> [There was] no sense of accomplishment. I was dancing around so much while I was doing it, the child quite enjoyed the sessions, but truly didn't understand a thing...I had finished what I could possibly stretch out to work on. We were ready to go on...then I said to him 'And sometime what we'll do is try three-sound words like bat' -- and he immediately just went b-a-t [the correct response].

These students of Diane's also had a non-verbal way of participating in the dialogues she initiated:

> In my class right now, I have a long table and I can tell. (my students are all sitting on one side of the table). The table has always moved forward if I've done something interesting. I always have to go and move the table back.

In another example Joan becomes a non-verbal partner but maintains a dialogue through her presence, history, and comfort level with the student.

> These kids that I work with even have had days where they get to bring a friend to teach concepts to and that's been really neat to watch, because I've let them use their own kind of teaching style to teach another friend in the classroom...And they got to use any materials in the classroom...So what does Shea ask me. He says: 'Next time I want two buddies to teach' and I said 'That's a good idea, Shea.'

The teachers spoke of being very aware of the ways in which their students communicated to them. In addressing specific students they were often able to share in detail the expressions, body language,

and comments which had come to have significant meaning and upon which they based their actions.

The dyad interactions did not always immediately result in learning experiences. Several of the examples thus far have referred to situations where learning did not occur suddenly but rather depended on a significant shared history with the teacher, materials, and activities. Teachers did not quickly discontinue the dyads; as long as the dialogue continued, even if it became routinized and predictable, the dyad was maintained. In these instances there seemed to be an awareness that time and practice were necessary before significant learning could be achieved -- the teachers were comfortable with watching and waiting. As Honor summarizes:

> The difference was that I knew Kieran took longer, that I would have to wait longer for some sort of reaction. Just that feeling that I shouldn't give up, that I would keep going. Where as with Rachel's case, I knew that I couldn't keep waiting because she should have had a reaction by then.

Teachers talked in a free and personable sense about their actions, motivations, and feelings when they were involved in dyad situations with students. There seemed to be an emphasis on the expression of individuality and humanness rather than the projection of a professional role. There was an allowance for honest and complex reactions to the experiences as they unfolded. Personal interests and passions, direct communication of experience, and personal

forgiveness were evident. Teachers moved into this role for themselves and in so doing seemed to understand and allow for similar development in their students.

Diane recognized the complex feelings that the young, autistic student created in her.

> I really enjoyed Gerald as a person. I thought, you know, this is a little guy who is just really neat in his own way. He certainly had lots of limitations and there were lots of frustrations as a result of those limitations. But I liked Gerald as a person. But Gerald never made that connection with me. I never got any sort of spontaneous eye contact. I never got any sort of communication initiated towards me for the sake of me being me. And that was a major thing. [refering to the outcome of the interaction reported earlier] I mean I felt needed and wanted as a person.

In another example Diane spoke of a situation in which she failed to appreciate an experience for a student because she felt pressured to accomplish other objectives.

> Anyways I was so angry at Misty because she wasn't attending to me and the reason why she wasn't attending to me was she was looking at Gerald...And she was just so pleased that Gerald had [looked at her]-- this had been one of the goals that the class had identified.

Bonnie spoke of feeling so frustrated with a student she "was about to pick him up and put him in the computer." She described the student's feelings as being similar. "Of course he was no better. We had spent

twenty-five minutes on something that he was just frustrated out of his mind."

In terms of personal passion Rob talked about how his energy for ideas was reciprocated by student interest.

> If I'm interested in something we're going to go for it and if I'm really interested in it this is gonna work. Chances are it's going to work because the enthusiasm -- it's just infectious. It really is. And I can't think of a person who hasn't been motivate from just, from my enthusiasm in getting into things.

Honor identified a situation in which her difficulties establishing a dyad with a student were resolved by the initiation of a more personal dialogue -- one which involved the child as a person more than as a student.

> So I had exhausted all those strategies which were working with the other kids. And so, one day, I just took her aside and asked her. I said " I'm having a real problem because I don't seem to be reaching you. Can you tell me what the problem is? Can you tell me?' She told me about her family life and it seemed that her emotional stability at the time was affecting her school work...So then once we had talked, and we talked about what she could do about the situation, I set up an appointment with the counsellor for her... And about two days later she was ready to work.

Related to this sense of personal wholeness which makes itself available to and active within the dyad, Rob talked about the security

that was created. From this base honesty, self-revelation, and risk-taking are achieved and validated.

> That was a real special time for me this year because I'd had a tough time with Jason and a lot of kids. [They] react flatly when you're talking to them about something that they can improve on. They might react defensively. And I couldn't read Jason...
>
> And he was then able to come back in public and say this [referring to a explanation Jason had shared with the class that he had only just mastered himself]. I was getting feedback on my own communication style. I hadn't inhibited him in any way...the initial contact was positive...He didn't feel bad about what we'd talked about. He felt secure in what had gone on initially. And that security is absolutely important.

The teacher's entry into a partnership with the child is also characterized by an intense emotional identification and mirroring of the learner's experiences. Frustration, fear, and success are shared and become a mutual experience; a resonance is established which the teacher is often conscious of but at a loss to explain. The student in turn can depend on and mimic the teacher's model of resolution and expression of those feelings.

Joan's description of one of her student's learning experiences illustrates her subtle but real investment into the emotional context that surrounds the learning experience.

> I was feeling good. Like I enjoy working with with the kids... I was very patient and we had lots of examples and we had

> manips [manipulatives] all over the rug...It's a very warm kind of feeling because I found that I was getting quite close to those kids
>
> It finally clicked. He was using the manips and he was putting them there and he got so excited and I got excited too because he jumped in the air and he was so happy that he had the answer and it was really neat. He was so enthusiastic and it just made me fell really good too and I knew he was really excited. Just the way he was jumping and almost trembling.

Honor spoke of an experience in which her awareness and insights into a student's feelings allowed her to model a way of expressing and dealing with those feelings.

> I just wanted to get him ready for it because change was very hard for him. So I started preparing him for it....I had talked a lot to him about inner dialogue: how we were feeling about things inside our minds; we're always talking to ourselves as well,--even though we're talking to people. I was saying to him 'this is our last time shopping, inside my mind I was saying that I'm really gonna miss this and I'm gonna really miss him because it's the last time'. We went in shopping and what Kieran had said when we came out really floored me because I didn't expect him to have the capability of saying it. He said: 'you know, inside my mind I was saying that I'm really gonna miss you and I'll miss shopping with you'. It was a really special moment for me...That was a really exciting moment for us.

Within the dyad an interpersonal dynamic appears to develop which allows both teacher and student to mobilize their full resources towards the act of learning. The teacher is able to give more than just knowledge; the student is able to learn what is most critical for him to master. The investment is less towards the end product of skill

mastery than towards the establishment of interactive understandings and habits which keep teacher and student active around the same agenda. Teachers and students encounter each other as complete humans and create acceptance and understanding of the complexity therein.

Several times the teachers made reference to situations where they have been unable to establish a dyad. This example of Rob's illustrates the frustration of the teacher when the connection that enables a student to be worked *with* rather than *on* is not be established:

> There's a lot of social problems. That person wants to be liked and its very difficult to like that person....It is a tough fight and just see this child explode before my eyes. I give them every chance....[talking to the student] 'You've blown my trust in you again. I don't know what to do with you. Like I've stuck my neck out again and maybe I shouldn't be saying this again but I stuck my neck out and we'll try again but it's getting harder every time.'

A technical and practical science grounding. In each of the stories, objectives and expectations for both teacher and student performance were specified. The teachers expressed clear goals and action plans for the student based on understandings formulated through observations of performance and mastery. They were able to describe the student's learning and had made definite assumptions regarding the prognosis for further learning.

The teachers advocated much of what process-product research has labeled effective teaching practises. Some of the techniques they advocated through their own practise included the use of manipulatives (Joan), thematic writing (Rob), cognitive behavior management (Diane), thinking skills instruction (Bonnie), and functional academic instruction (Honor). Program objectives came from a variety of learning domains: social, emotional, cognitive, behavioral, and motivational needs were considered in the development of programs. This holistic understanding of student needs reflected an awareness of both mandated and recommended approaches to instruction.

Diane summarized her plan for one of student's, Colin, in this way:

> Colin,who is extremely impulsive and is like sort of metal to a magnet, just has to sort of touch everything and sort of be involved in everything, had been on and still is on a program to teach impulse control and part of the program was telling himself to stop. We had gotten to the point where I would say 'Colin, stop' and he would internalize it from there.

Bonnie explained her plan for this student based not only on her understanding of the individual student but also on her understanding of the needs of students with particular disabilities.

> With this young lad, he tended to be a memorizer. With his hearing impairment, he has to rely a great deal upon the written word. Since the written word is extensively different than

> conversational language the concepts that he will have to rely on written will be principally conceptual....So I have to be able to broaden that base for him, using my own bias, in terms of what I consider important.

Honor attributed a peer - teaching strategy paired with a functional approach to academics with creating an opportunity for this student to develop emotionally as well as cognitively.

> He had been quite irresponsible and we put him in the milk program and he was in charge of another kid that needed help so he was really like helping this other kid. So it increased his feelings of self - esteem and worthiness and at the same time was teaching him grade seven math, and we were doing a problem with ratios one day...ordering for each class in the ratio of one class order another and he understood it because he had the grounding in something that was meaningful that was something he did through action as if in doing it himself he understood it in abstract.

When the teachers told their stories they introduced the student, the student's performance levels, and the master plan as a single unit. It was as if these elements defined a minimal expectation for the delivery of educational services to the student. The teacher's also supported problem solving approaches to education based on assessment, hypothesis generation, and trial and error implementation; the mastery and consistent use of "effective teaching practices" was also standard.

Technical science was very much a part of these teacher's educational repertories. There seemed to be an easy compatibility

between practice teachers had found effective through experience and the terminology and practise adopted from the research base. In discussing her reason for adopting manipulatives in her math program Joan said " I guess based on other experience that I've had in the classroom and also on reading that I've done too -- but probably more on experience that I've had with kids." Bonnie talked about drawing on her own "personal experience as a learner, and my own experience as a teacher." This understanding was given priority but supported with a comprehensive understanding of theoretical understandings of learning and curriculum mastery.

Almost universal was the use of modelling as a key practical strategy to establish and reinforce attitudes and approaches to learning. This tendency became stronger and more specific within the context of the dyad and seemed to have a role in each one of the interactions addressed. Joan spoke of the importance of cooperative environment but maintained that they could not be achieved if teachers could not model cooperative behavior. Similarly Rob spoke of his modeling of honesty, taking responsibility for mistakes, and risk taking as a central teaching strategy to achieve awareness and growth of these skills in his students.

The creation of an atmosphere which supported student self-esteem, curiosity, and motivation to learning was also a consistently reported and highly valued understanding among the teachers. Teachers felt it was their responsibility to provide the most positive

learning environment possible; in some instances this was felt to be the primary role of teaching. Honor termed this "enabling" and latter coined a second term "nurturing". Joan described an appropriate learning environment as:

> I think if its a warm, friendly, comfortable environment where children know that there are going to be be no put-downs and that its okay to make a mistake but I'm going to try and learn from it, then I think they feel more comfortable and are willing to take risks.

The teachers were clear and articulate in expressing the grounding and foundation that allowed them to feel in control of learning outcomes. Developed out of a history of proven outcomes, each teacher spoke of preferred strategies and methods used to create and optimize the conditions of learning. These teaching styles, while not attributed to theoretically sanctioned practices, were not incompatible with them either. Supportive strategies such as modeling and developing classroom climate were balanced with the development of expectations and programs to ensure learning was monitored.

Implementation of these strategies did not guarantee change, rather they provided a stepping off point; the opportunity to be efficient and competent by implementing the most likely solution first. Nor were they inflexible; strategies were readily disposed of if a student was unable to respond to them. Technical grounding provided an initial

content; the teachers first interactive turns with the student were structured by these understandings. Teachers were guided, given a starting point, by this knowledge base. The knowledge base also existed for them to fall back on when they were unable to achieve a desired result.

Learning involves a separateness between the teacher and student. Despite the close and intimate nature of the dyad the teachers communicated a sense of separateness, of individuality, which was maintained in every teacher student interaction. The learning experience belonged to the student. It was possible to observe the learning and to share in the emotional products of the experience but the moment was the students. The teachers spoke of being surprised, of waiting for when students were ready, and of students learning on their own. Bonnie expressed this awareness of the otherness of the learner in her comment:

> It works when the child's ready and that is impossible to predict. It's impossible to plan for. What happens for me is I keep plotting away, in as many varies ways and as many presentations, as many styles as I can come up with, and when the kid's ready, he learns.

Diane spoke more bluntly but nevertheless to the same point when she said "They're going to learn in spite of you not necessarily because of you."

The singularity of the teachers has already been acknowledged to a large extent. They took the lion's share of the responsibility in initiating the dyads; they invested energy into the understanding of the student as an individual; they monitored what they were doing and its impact on the student. They maintained their pedagogic responsibilities throughout.

Students were also felt to have responsibilities -- although different ones from their teachers. Diane spoke of the student being ultimately responsible for the learning moment:

> They're ultimately responsible because if you sort of attempt to teach them something at that point that is not compatible with what they're doing...they will tell you to stop and the direction is broken.

Later in reference to a specific student she said " I think he learned a lot of things during the time he was with me and probably a lot of things were learned without me being there." Bonnie's words were:

> because, of course, me challenging a kid, in my mind, and him being challenged, in his mind, are two different things again. I can throw the gauntlet down as often as I like and if that little beggar doesn't pick it up, it's not going to work.

Through dialogue and through the dyads teachers worked to learn about the student; the sense of separateness was not lost -- instead it

motivated the establishment of the dyad and the need for ongoing dialogues between teachers and students.

The process of learning is an active emotional process. The teachers reported being very aware and involved in the emotional transitions that both they and their students experienced during the course of learning. Generally three transitions were noted: an engaging emotion like frustration or desire was noted initially; an active emotion (i.e. curiosity, interest) which sustained activity and attention to the task as the student attempted to develop mastery; and a sudden appearance of positive or euphoric emotion which surfaced with the awareness that mastery had been achieved.

Within the dyad context the teachers frequently introduced a situation and experience which created the initiating emotion. They depended on the relationship to provide the necessary support to the learner; ideally the learner was engaged and settled into an active effort to master the task.

The strength of the emotional responses to learning were important variables that the teachers monitored. The creation of too much frustration was seen as dangerous; too few opportunities for success were also perceived as severely damaging to a student's ability to become active with learning.

Joan describes the role of some of these emotions in her understanding of how student's learn.

> I think every kid wants to feel successful but when they're not getting any questions right -- I think they can feel really frustrated and think: 'I don't think I'm ever gonna get this' and they might think 'well okay this looks kind of fun. I'll try it.' But once they start internalizing what they're doing and why they're doing it and then, when it clicks, I think they get really excited and then their attitude kind of changes and they think 'I did that! Then I can do something else too.'

Rob also addresses how the positive emotions generated through mastery become in themselves motivation to engage in a learning cycle again.

> Just the enthusiasm and just the shear enjoyment of becoming really good at something, you know, really learning about something and getting right into it has been really a motivation for ninety-nine percent of the kids that I've worked with.

Bonnie talked about her fears in this situation where the experience of frustration was dominating: "We had spent twenty-five minutes on something that he was just frustrated out of his mind. And then I had this incredible sensation that he'd probably hate computers from now on as well."

Once the task has been actively embraced by the student, awareness that the task is manageable replaces the feelings that initiated the experience. The emotional experience becomes more focused, less distracting, and seems to be intrinsic with the task itself.

With the realization of learning or mastery comes the last and most powerful of the emotional experiences. So central is this event in the shared stories that many examples have already been given. It is the understanding which dominates the anecdotal accounts. Simple attempts to account for it are frustrating; they do not create satisfaction in terms of their explanatory value. As was noted in the introduction the revelation of this experience as a theme does not do justice to the power of attraction that it has for teachers or for students. This issue perhaps more than any other developed in this section deserves further thought and attention.

The Phenomena of Change: A Teacher's Perspective

The phenomena of change as teachers experience and relate to it is complex. The sense of a right answer -- in terms of how to construct learning for students -- is absent. In its place exists a multi-dimensional understanding which confirms both common-sense and technical/theoretical notions of good teaching. The teacher's stories fail to confirm the notion that teaching theory and practice are irreconcilable; these two constructs are not exclusive: theoretical understandings are one of several elements that comprise the total experience surrounding learning.

Of particular interest in terms of this inquiry is the consensus teachers shared regarding the limited expectations that could be

assumed in a given learning moment. A learning moment, as reported here, was the result of an active process of being with, and fully experiencing, a learner's encounter with new understandings. The teacher's involvement and facilitation can be traced; the momentum generating aspects of the teacher/student dyad can be explicated; however, the culminating result is vicarious experience for teachers. Sharing this experience with students is viewed as an attractive and motivating opportunity; however, the recognition of its significance does not equate to a full assumption of responsibility and ownership of outcomes. The belief that the act of teaching is bound up in notions of control and change is challenged by these teachers. The absoluteness of cause and effect rationality is part of a theoretical world which does not appear to have resonance in the practical phenomena of learning and teaching.

Chapter 5.
Teacher Interpretations and Reflections

The Nature of the Text

Once the teachers had shared their ancedotes they were asked to reflect on the significance of the event. Through conversation they were encouraged to develop how that experience reflected their understanding and beliefs about teaching. The interviews were conversational dialogues; as my attention and interest were captured by their words I was able to respond and join in with their exploration of meaning.

Occasionally what they had to say so captured my interest that I became somewhat directive and went on to establish my own points. Fortunately these instances were fairly obvious in the transcripts and were typically rejected by the teachers as an expression of their personal beliefs. Paraphrase and summary were used extensively to create opportunities for the refinement and consolidation of ideas; the use of metaphors, labels for experiences and events and actual examples of students and experiences were particular cues to elicit further elaboration.

As previously noted the interviews were structured recursively around ancedotal examples of learning situations. An absolute criteria was not established to determine where an ancedotal report left off and

teacher reflection began. Comments pretaining or elaborating on an actual experience of learning tended to be reported in Chapter Four; those that related to the teachers' more global or idealized sense of learning are reported here. The actual citation of teachers' words was also not dictated by a criteria; a reflective statement could be used to support a comment regarding the actual phenomenological experience and vice versa. I allowed myself to be guided by a pragmatic desire to use actual teacher dialogue to punctuate, clarify, and personalize the summaries presented.

In interpretation I again found it difficult to restrict myself to a strict sequence of interpretative operations. In the end mutiple strategies evolved and were applied -- rarely in the same sequence, but to the same end. Summarization and interpretation of the teachers' reflections was in actuality complex process to work through. The teachers did not respond to the opportunity to reflect in the same way. In some cases technolodgy was emphasized, in others practical applications, in still yet others social structures and philosophy. Integration of meaning could not be achieved through identification of similarities; teacher diversity formed a better conceptual and organizing structure. Assuming the differences noted related to actual differences in the construction of pedagogic understandings presentation of individual stories establishes an appropriate precedent.

Once organized in this way the results became more meaningful. An emphasis was placed on accounting for the full range of meanings

presented; detail and specific ideas were developed subordinately to this broad picture. In presenting this framework to the participant teachers, however, I experienced their hesitation and concern. With the ancedotes the interpretation was well supported; at no time did any one teacher feel vulnerable to censure. The proposed reporting of their reflections, however, was experienced as a risk. They expressed, indirectly, the desire for a positive and idealized presentation of their reflections. There seemed to be some discomfort with the level of personal exposure that this interpretation created.

The sense that these presentations *are* the teacher (the primary fear that was expressed) is erroneous. These reflections have much more of the flavor of vignettes; under these conditions, at this particular time, these are the thoughts and reflections that surface. They are small samples from which generalizations can not be made. They do provide a window, however, into the world of teachers, into their experiences and into their formulations of meaning.

Honor: The Vision of Educational Ideals

> There's never a right answer but there's always a better one. (Honor's comment during a discussion with myself regarding the themes identified in her interview).

> To hit a kid. To produce. To meet one of their needs. To nuture them. To feed them in an area where there's hunger, if you like. I'm using a metaphor. To provide them with something that is meaningful for them that from the experience their horizons broaden, their understanding broadens; of the world or of relationships, of whatever. The act of teaching something

broadens their perceptions of the world; their understanding of the world. This is what I mean by hitting.

When the kids realize that you were really listening to what they were really saying, not what you thought they were saying, that's when change came.

Honor's reflections structure themselves around theoretical and personal ideals of pedagogy. These ideals function as the roadmap to direct and define educational action and understanding. It is not a simplified sanctioning of "motherhood and apple pie" values in education; it represents the expression of the standards and self expectations that Honor experiences as parts of her teaching reality. It involves the explication of idealized roles and expectations for both teacher and student.

As such, Honor's reflections contain little of Honor as a person. The actual encounter that is presented is the ultimate or absolute -- again the ideal. Particularily strongly expressed was the belief in the student as a separate, autonomous, being. The teacher role was to provide benevolent and compassionate guidance; teaching was primarily motivated by a desire to see the student achieve fullfillment and personal growth. The ideal teaching role was therefore portrayed as a subtle one. Rather than providing actual information it was described as listening, caring, nurturing, and enabeling.

Honor's sense of the student and how teaching might relate to them is communicated in these passages:

> I have to say that most times I connected was when you took the time to really talk to them and really listen to them and hear what they were actually saying and probing to see if what your perceptions of what they were saying were actually what you thought they were saying.
>
> You hear from them. What their interests are. What their interactions are with people. What their concerns are. What's taking their time. What's taking all their energy. What they're giving their energy to. What motivates them. These sorts of things.

As the reality of the student is different from that of the teacher; the student is understood to be in many ways closed to the teacher. This boundary can not be forced; circumstances and choice allow the teacher in. Many aspects of regular teaching experiences create and emphasize the closure. When this happens full responsibility falls to the student:

> Sometimes when you have a group of kids, you cannot interact with them on an individual basis; because you've got your objectives set out. You've got your goal and your whole purpose is to get them to that goal. You don't have time to tap into their thought processes.
>
> If you continue and keep trying, one day the kids will grow from the experience -- if the experience is one that will allow them to grow -- if it's right for them.
>
> In my experience, a lot of things I'm asked to teach do not fit into the kids' needs. I think that's the constrictions of having a curriculum....But kids are at different levels and we often miss kids because of what we're asked to teach them. And yeah we miss a lot of kids. If we hit twenty percent we're doing well. There're so many kids on the fringes needing other things than what we teach.

To the teacher falls the role of maintence of both the objective and influential characteristics of the adult teacher as well as the deeply humanized understandings of caretaker and friend. Developing objectives grew out of this combined sense of supporting and facilitating learning:

> I was more concerned that he understood that it wasn't the end of something
>
> I think the teacher role is to allow kids to see their own strengths, to see what they're capable of doing...that they're people that have an effect...that they do have an inpact upon every moment, whether it be good or bad, but that they are connected in some way to knowledge of to people of to an environment.
>
> Always have hope that you can reach kids but the role is definately to nurture.

Bonnie: Self as a Metaphor

> I have to draw on my own personal experience as a learner, and my own experience as a teacher, to know what I consider to be essential components of learning.
>
> Learning is fun! Learning gives you a capability to do things, to be things, to see things when you look at them in an entirely different manner. It's just simply fun! And fun should be an essential part, if not all, of the learning process.
>
> There's a delight in sharing what is important to one and finding someone else who also feels it's important, at least important enough to learn, important enough to pay attention, important enough to show this little beam when the concept is fully understood.

> So the formula for the perfect teacher, I guess, is to take the personality that already exisits and give that personality sufficient academic training to be acceptable in the school system.

To understand Bonnie as a person is to understand Bonnie as a teacher. While this might be a truism inferable for all teachers, in Bonnie's case, it was a clearly articulated relationship; one that was iniated by herself. Integral to Bonnie's reflections was her use of "self" as her metaphor -- and mentor. Through the use of this analogy she found a way to talk about and create understandings about learning and her own teaching art. Teaching had meaning as an expression of personhood; the meaning of learning could be found in it's association with the development of personhood.

Bonnie shared two complimentary yet separate aspects of herself which were active during teaching. Almost Yin and Yang in nature they captured an intuitive, emotive aspect and a rational, intellectual aspect. In speaking of establishing a understanding of a student Bonnie supplied the two different possibilities within the same example:

> I have to know that kid. I have to have tested him. I have to have tested him under a number of erudite exam situations that get at what I consider, personally I suppose, to be essential to learning. In that sense I certainly have a biased test battery because I have to draw on my own personal experience as a learner, and my own experience as a teacher, to know what I consider to be essential components of learning.

The intuitive element was characterized by emotional freedom, by passion, by valuing, and by taking risks. This seemed to be the aspect that Bonnie wished to receive the greatest emphasis. It certainly seemed to be the element that she most valued in herself and the domain in which she most wanted to make a difference to her students.

> So the advantage then of starting with something that I'm passionate about will often lead the child to talk about things that he also likes and the concepts that I want to teach the child can then be channeled through his interests...In essence I think I can get the focus on the fun of learning established without the automatic fear of failure or the immediate shut-off.

> It makes me feel good, I guess....But also because I think what I'm teaching them is important....It was important because he couldn't take so much delight in learning it if it didn't have some value for him as well.

Also expressed however was a systematic, pragmatic and intellectual way of being and way of understanding self and interacting while teaching. At no time were the two senses of self in conflict. As parts of the same metaphor they created a framework against which complex and flexible behavior could be accounted for. They impressed a sense of self-awareness and internal resourcefulness such that Bonnie herself became both the necessary and sufficient ingrediant in the generation and creation of teaching options. Physical, mental, and emotional involvement with the act of teaching created the options she needed to have to achieve success.

For Bonnie learning goals were an expression of personal values: pedagogical beliefs were an extension and elaboration of these values. By giving herself conscious permission to mobilize her "self" in the acts of learning and teaching she created expectancies and permission for her students to do the same. Because self was so clearly understood the sense of other could also be defined.

Rob: The Classroom as an Introduction to Community

> They are things that are important here and they're things that we recognize all the time: honesty, perseverance, sincerity, friendliness, responsibility, all those things.
>
> I think within the way I try and do things now, the big picture becomes more apparent and that with happiness and responsibility and with caring and trust, all those things are linked and maybe in that way are a little bit more obvious, that you know, one sort of social behavior leads to another and you can't isolate them but they're all in a big ball.
>
> If I can't teach somebody to add or subtract, if I can't teach them to read, if I can't teach them to do anything, I hope I send them out as a socially functioning individual.
>
> The social implications, the social things which must be taught, must be taught overtly and the kids need to know at least the right way for us to behave socially and the wrong way. They can choose their way....They're going to know at some point in time a significant other in their life felt that this was important.

If Honor's vision was of educational ideals; Rob's was a vision of human and socialistic ideals. In particular the social dimension of

shared human experience was referenced and developed; community, trust, and social accountability were identified as understandings around which expectancies for growth and learning were created. The words responsible, reasonable, trust, cooperation, perseverance, and honesty occur with significant frequency; the intent of these meanings is realized as much through their redundancy as through the particular semantic choices. Rob structured his understandings of learning and teaching responsibility around the development of the individual within a social context:

> I think as we talk about it, that is important to me. Very, very important that we are developing people who are responsible, who are cooperative, and who are empathic because that is the only way that we are going to survive.

Social responsibility was viewed as a separate objective from academic mastery. When asked if there was a connection between social mastery and academic mastery Rob responded:

> "I don't know I still don't know. It would seem that the socially more competent child can look more eclectically at things... I don't know where the correlation comes...[and at a later date as we reviewed the interview] No I'm not really sure if there is a connection. Its a more complex issue. I could just value social so much I teach differently to these students.

Developing interpersonal skills and appropriate group behavior was not seen as a means to an end in terms of also accomplishing mandated academic objectives. It was seen as an end in itself -- a

preparation for the real world and the kind of social structures invisioned (by Rob) as appropriate in the real world.

Rob did not advocate unconditional acceptance of students as the role of the school. A conditional acceptance based on the school's social order and demands was expressed when Rob said " But they need to know that they're valued with a proviso that they're honest and that they follow the rules and the norms." Other statements reflected his sense that schools could not become surrogate parents. Basic needs were felt to be the responsibility of the family -- "if it's that basal level of somebody appreciating me, maybe from the family end isn't there then it's really difficult. If you've got that little bit then we can go."

Rob adressed another separation of roles. Schools were acknowledged as being separate from education and learning; schools were felt to be unable to meet the needs of all. Refering to native students he said " What I'm trying to do, I guess, is motivate everbody in a system that isn't for everybody....Good education can be whatever you want. But we can't." At another point he said:

> What is important to you might not be important to me and maybe what we're teaching just won't have relevance, regardless of how we do it to some people. And maybe in that way we're failing those people; very desperately failing them. But I suppose by making it enjoyable and turning on those people -- people who you can turn on, maybe the borderkline ones will go that way. But that's not to say that's the right way.

Beyond the powerful communication and expectation for social behavior which his classroom was structured upon, Rob addressed specific understandings of the teaching role. Like Bonnie he depended on his own resources and ability to model excitement and passion for learning to engage students in active participation and involvement with materials.

> Suddenly I realized that you do have to turn them on, you have to get them going somehow and you can do it with almost anything. But you have to get it so that it means something to them; you give them something to hold onto, something that they get good at and something that they could be somewhat excited about. But somehow you have to generate that excitement.

> Generally speaking I go from what I'm interested in. If I'm interested in something we're gonna go for it and if I'm really interested in it this is gonna work. Chances are it's gonna work because the enthusiasm -- it's just infectious.

Rob also addressed the need for students to be able to take risks. A lack of risk-taking was felt to reflect a lack of trust in himself and in the other members of the classroom. His responsibility as a teacher was to create a social environment which fostered and modeled trust and honesty. Responsibility for mistakes and the acceptance of feedback about performance are also behaviors that Rob expects to develop within the supportive social environment. In these examples he models how he would address these issues directly with students in his classroom:

> 'Well you know, it's good you're expressing that and it's good you're saying you've got a problem and the other kids aren't gonna be down on you either because you're saying that.' And that's part of the bigger whole; trying to develop that feeling of trust and understanding within the kids. And you can do that and it has to be overt.

> 'We're not just gonna cut you down. There's good in everything.' We're always moving in that direction, we need to have positive feedback. Everybody needs it. We have to have accurate feedback but we also need to have positive feedback. We all need it. And it goes down a lot easier if you know what you're doing right.

Rob spoke of his classroom as having a big picture -- a reference to the social expectations and beliefs that formed the foundation for his judgements of his effectiveness and of student achievement. This was the message he appeared to most want to communicate about himself as a teacher. What he achieved in the classroom evolved from an explicit understanding of his beliefs of the role of schooling and of the classroom in a larger social order. Rob's social values are alive in both his descriptions and in his expectations in the classroom.

Diane: Teaching in the Active Present

> He just had to make that connection for himself... And you can't measure it either quantitatively. It's sort of an instinct. You feel it from one individual to another. Like you feel this happening. It's something that's really hard to measure. You have to sort of feel it inside.

> I think he learned a lot of things during the time he was with me and probably a lot of those things were learned without me being there.
>
> Content is being secure in your knowledge base in terms of what you want to teach -- is a tremendous factor -- being secure in your knowledge of the process of teaching.

Diane's interview was the most difficult to develop a consensual understanding of. With each review it became apparent that Diane only ever "came to life" when she spoke of actual learning and teaching scenarios. The rest of the interview involved a sharing of instructional mechanics -- communications which lacked the expressed purpose and energy which emerged during storytelling. Without this sense of vitality the communication of personal investment and ownership was lost.

Why was this interview so different from the others? A number of possibilities should be considered. Diane spoke of fatigue several times during the basic interview; perhaps this interview should have been rescheduled. Influences related to past interactional habits -- ways of relating to each other and communicating about learning -- may have interfered with the process being developed here. Finally the reflective stance may have been an inappropriate mode of inquiry. Perhaps the verbal/linguistic reflection was insufficient in allowing Diane to develop and explicate her ways of thinking and responding to learning and teaching situations.

The abrupt and dramatic differences between how Diane related lived action and events and how she related to requests for abstraction and reflection suggested the latter element was a factor. There was the sense in Diane's communications that the experiences she shared were self explanatory and that further analysis detracted from meaningfulness rather then added to it. The moments seemed to be experienced as complete in themselves; somehow their very nature prohibited further development and scrutiny.

Diane shared similar understandings of teaching strategy and objective development that the other teachers did. Her communication of teaching process focused on her knowledge base as a grounding for planning and program development. The active experience of learning and teaching that Diane presented was much more intuitively based and seemed to resist explanation or qualification. The bulk of these experiences were shared in Chapter Four.

When pressured to move beyond these understandings the account became nonspecific, contradictory, and occasionally self-depreciating. The absence of a positive experience with reflection and with the pursuit of more abstracted understandings leads me to adopt the stance that the active present, the anecdote, was Diane's experience; in itself this vignette becomes a worthy story to tell.

Joan: The Craft of Education

> [Guaranteeing students] would not learn? Give them a classroom where no risks were allowed, where kids are not allowed to interact, where kids must sit all day, where kids must fill in the blanks all day, where kids are not allowed to voice their own opinions, where there is no small group work allowed or leadership skills taught and reinforced, no expectations laid out, no structure and routine and I think you could be almost guaranteed to have a successless environment.
>
> I think it's really important for teachers to make changes. It's too easy for teachers to get into ruts. If we show them that we're willing to learn, because we can keep learning every day, and we are open and willing to adapt and change, and apply suggestions and be able to be open to suggestions we're being really good role models for children.
>
> I'm not saying I do them a hundred percent of the time. I'm sure I have days where I'm not as conscientious as other days but, on the whole, I try and most teachers try who are conscientious and want the children to do well. They try to be patient and understanding and look at all those things.

Occasionally a distinction is made between craft and artistry. Craft refers to highly skilled action which is directed towards utility and practical implementation; art to the generation of products with an aesthetic effect or value. Joan's interview reflected the consummate craftsman. Her knowledge of strategy, her options for implementation and her beliefs about educational practise reflected an external orientation; materials, curriculum, and instructional strategies were all tools that she spoke of accessing and using with great familiarity and frequency.

While expressing these beliefs she acknowledged and spoke to the needs of students; her perspective was however, that of the informed teacher. In a way that was different from the other teachers the children Joan was involved with were *students*. Most of the concerns were focused on classroom skills and achievement; a belief system which expected students to learn as the result of teaching was evident:.

> Not every kid can learn or feel that sense of accomplishment with the same kind of strategy....If we really believe that kids can do things there has to be a method or a strategy or something that can just make them click.

More than any other teacher Joan embraced teaching responsibilities as way of structuring an explanation of teaching and learning.

Joan's approach to strategies was eclectic and justified by a practical standard rather than a theoretical one. She advocated cooperation but felt comfortable with competitive activities; she encouraged independence and initiation but created expectations and standards for behavior. A classroom environment which was positive and supported risk-taking was highly valued. In creating a formula for the perfect learning experience she said "I think the positive environment plus the cooperative learning plus expectations...plus time to work on skills...I think there has to be time spent with students as well."

Joan's reflections vary from the other descriptions in one important dimension: while a strong sense of Joan the teacher emerges very few individual and personal insights are gained. While her reflections reflect ideals in a manner similar to the other teachers Joan's reflections restrict themselves to the idealization of the role of teacher. Joan also communicates the strong sense of an internalized belief that teachers are responsible for learning change. In many respects her reflections represented and supported the assumptions that drive empirical research.

A Reflective Summary

Many of the common themes shared between the teachers are best represented in the Chapter Four presentation. The reflections represented here are so highly individual that reducing them to summative generalities seems to defeat the purpose. Vandenberg (1974) spoke to the belief that if teachers engaged in reflection then a grounded and basic educational theory would be established. "When the practitioner's pre-theoretical understanding is rigorously explicated by an immanent reflection, i.e., by an interpretative hermaneutic, it becomes fundamental educational theory" (p.190). Perhaps viewed collectively, or by assuming a great deal about the nature of practical teaching knowledge the reflections of these teachers could achieve that end. A simpler and more coherent understanding, however, is created

by interpreting the substance as less about education than about people bringing their awareness of themselves, their beliefs and values, and their dreams into the context of their work.

A return to the initial discussion (Chapter Two) regarding the explication of practical and tacit knowledge is appropriate. The assumption that teachers can articulate a personal craft knowledge is not shared by all. The term "tacit" has been employed to delineate the unconscious, automatic, nature of practical teaching knowledge and action. Even when teacher reflection is supported by a relevant, practical focus -- in this case the anecdotes -- the essential nature of the reflection must be carefully considered. In this instance teachers appeared to grasp a frame to organize their reflections; the frame embraced typically spoke to the personhood of the teacher. It seemed that there was not so much a pedagogic understanding as there was a self-understanding. Understandings of the learning, students, the classroom etc. were framed around the same values and goals that structured personal behavior. It seemed as if self was the model and potentially the unifying principal in terms of how these teachers constructed teaching.

Chapter Six.
Aesthetics and Learning -- A Discussion

> There is no such thing as an *objet d'art* in itself; if we call any bodily and perceptible thing by that name or an equivalent we do so only because of the relation it stands to the aesthetic experience which is the 'work of art proper'. (Collingwood, 1938, p. 37)

Art and Aesthetics As Metaphors

To consider art as a metaphor for teaching is not an original thought. In educational philosophy, as in many other domains of human understanding, the metaphor is resurrected each time the need to create polarity with scientific domination and direction is perceived . Art and artistry exist in tradition as signifiers of spiritual and magical ways of being in the world; they define the counter-culture of rational, linear, and technical understandings.

In its most routine usage the metaphor is invoked to explain the unexplainable (Green, 1971; Smith, 1971). Art is used in a mystical or romantic sense to communicate simple but powerful images of ideals. Rubin (1983) provides this example of teaching as art:

> Why do students respond to one teacher with delight and to another with disdain, despair, or dread? *The difference lies in* the intangibles of artistry. These intangibles transcend charisma,

> although gifted teachers are often blessed with charismatic qualities. They go beyond style because great teachers neither function in the same way nor embrace similar beliefs about teaching. They have little connection with high levels of intelligence because the brightest teacher is not necessarily the best teacher. Although they are committed, dedication seems an essential but incomplete condition for artistry: zealous and highly devoted teachers sometimes get meager results....The qualities that undergrid teaching virtuosity are intangible precisely because they are imprecise. Yet, they exist. (p. 44)

In these instances the metaphor's power lies in its ability to establish the connotations of magic, mystery, and creativity. Berlyne (1968) elaborates:

> Art has been traditionally regarded as something unique and august, to be treated apart from everything else. We know the origins of the arts are bound up with magic and religion. The visual arts and drama, in particular, began as integral elements of religious ritual, and the connection with the supernatural has persisted in more sophisticated forms. Artistic creation has commonly been attributed to divine inspiration. According to a view that was particularly prevalent in the Romantic period but still manifests itself... the artist is a superman. (p. 9)

Smith (1971), comments further and addresses the specific use of the metaphor "teachers as artists":

> The value that the public rhetoric of our culture attaches to novelty, originality, and creativity -- a legacy from the romantic period of the nineteenth century -- has perhaps resulted in an affinity for the artist and artistic creation as a paradigm for all human activity. Further, as perennial criticism testifies, the status of teacher as professional is not beyond question; thus there is all the more reason for wanting to elevate his status by any means possible. (p. 568)

The mystification and romanticization of education and the teaching process creates "poetic license": permission for educators to act on personal theories, suppositions, and conjectures. The metaphor shifts from an explanatory vehicle to a rational for teacher autonomy and freedom. It encourages a personalization of pedagogical beliefs, offering justification and accountability for a myriad of styles and standards. It assumes that creativity and individualization will always be expressed in a way that improves the learning experiences of students.

Thus the metaphor, developed in this fashion, is subject to serious censure. It is inappropriately simplistic in its contribution to

the creation of pedagogical understandings. A close examination of the metaphor reveals how seriously overextended it is. Specific technical skills and understandings are not necessary to achieve art (Howard, 1982). There are, however, specific skills required for teaching. Education is goal directed with standards and expectations for outcomes (Greene, 1971) while art is not. The valuation of romanticism above pragmatism fails to support a reasonable expectation for pedagogical practice. Personalization of teaching through authenticity, ingenuity, and creativity, is but one aspect of many important pedagogical skills domains.

In a similar, but more selective, type of usage the terms 'art' and 'artistry' isolate and label phenomena which are poorly understood because of complexity, infrequency, or lack of development. In this instance the metaphor is more rigorously defined. Its purpose is not explanatory as much as it is definitive; both emphasis and delineation of an phenomena are achieved. While the connotation of mystery or magic is retained, the emphasis is on discovery and clarification. The metaphor creates a foundation from which questions can be asked; it is then left behind as new knowledge and understandings are achieved. Schon (1987) creates this type of metaphor when he says:

> We should not start by asking how to make better use of research - based knowledge but by asking what we can learn from a careful examination of artistry, that is, the competence by which

> practitioners actually handle indeterminate zones of practice -- however that competence may relate to technical rationality. (p. 13)

and

> Inherent in the practise of professionals we recognize as unusually competent is a core of artistry. Artistry is an exercise of intelligence, a kind of knowing, though different in critical respects from our standard model of professional knowledge. It is not inherently mysterious; it is rigorous in its own terms; and we can learn a great deal about it -- within what limits, we should treat as an open question -- by carefully studying the performance of unusually competent performers. (p. 13)

As the metaphor moves away from the common usage and increases in sophistication its application becomes more disciplined and precise. In its most developed form the philosophy of art or aesthetics is applied; the metaphor transcends naive, common perspectives and embraces formalized inquiry. Art is defined as that which produces an aesthetic experience. Aesthetics is defined as "the analysis of the values, tastes, attitudes, and standards involved in our experience of and judgements about things made by humans or found in nature which we call beautiful" (Angeles, 1981, p.4); aesthetics is

metacriticism of art and other aesthetic objects (phenomena which give rise to emotional appreciation and valuation).

Aesthetic philosophy does not concern itself with the useful or moral -- rather it seeks the explication of meaning created in and through emotional responses to phenomena. It involves an exploration of the experience of creating and interpreting and experiencing art. According to Spitz (1985):

> There are three major areas of concern to aestheticians, namely, (1). the nature of the creative work and the experience of the artist, (2) the interpretation of works of art, and (3). the nature of the aesthetic encounter with works of art. (p. 10)

Aesthetics also shares an intimate and connected relationship with the the understanding of hermeneutics presented earlier. Both structure understandings of interpretation around acts of mutual construction between creators and interpreters. For both meaning is not absolute but rather a reflection of the active experiences of interaction with the phenomena.

For several reasons aesthetics forms an appropriate frame to guide further interpretation of the results of this inquiry. First, continuity with the original metaphor, established at the inception of this project, is achieved. Fidelity is maintained with the understandings which initially defined this project; evolution is also

incorporated -- the metaphor has become more specific and capable of generating insights.

Second, this thesis has directed its attention to questions remarkably similar to those generally addressed in aesthetic endeavors. Experiential phenomena was interpreted in terms of its temporal, physical, and emotional properties; a dialogue with the individuals who authored or created the phenomena was completed -- their understandings and interpretations of the phenomena were collected and presented; and the nature of the experience itself and the experience of the original creators are threaded together to develop yet another level of interpretation and meaning.

Finally this thesis has maintained its quest like nature throughout. It has been an active, interactive process between concrete knowledge and experiences, the development of relevant questions, and the exploration of methodological and interpretative structures. The assimilation and exploration of a new schema of interpretation is appropriate if not inevitable.

Aesthetics and the Phenomena of Learning

> I think the particular self-sufficiency and satisfyingness of aesthetic experience, its ability to combine intensity of livingness with harmony of the self, do justify us in using it as the kind of exploratory model I have described....What makes a good aesthetic experience is not what makes a good religious experience, or a good educational experience, and the same may

> be said of all the other varieties of experience, such as verifying a scientific theory, making a moral decision, performing a political act, etc. But the traits that distinguish aesthetic experience and determine its peculiar goodness are highly generic and independent of practical contexts and interests. So it is natural to inquire whether this kind of goodness can be, or should be, an ingredient in other kinds of goodness. (Beardsley, 1970, p.13)

The aesthetic experience: understandings of emotion and pleasure that are constituted in the dialogue between the work of art and the audience. A moment characterized by " a deep rapport between subject and object;" "a heightened awareness of reciprocal structure, of being at one with the world;" and, in psychoanalytic terms, "a return to a state resembling symbiosis with the all good mother" (Spitz, 1985, p. 139, p. 140, p. 142). Beardsley (1970) ascribes the aesthetic experience with five characteristics:

1. Attention is attracted to some portion of the phenomenally objective field, to its elements, and to their respective relationships. The aesthetic experience has boundaries in time and space. Within those boundaries there is an active awareness of the form which allows perception to be present to experience.

2. There is an active analytic process which makes sense of the elements in the phenomenological field. Change over time, the value of order and the impact of similarity and contrast become ways of interpreting the construction of the phenomena. According to

Kushner (1983) " one may appreciate the work of art to the degree that one understands it" (p.31).

3. That there is an understanding of quality. Aesthetic quality refers to the representativeness of the experience to actual human contexts. Ideas, opinions, beliefs and valuations can be housed in recognizable symbols and shared meanings. These qualities are recognized as part of the perception of form and form relationships.

4. The experience is unified. " An aesthetic experience is unusually complete, in that the experience marks itself off fairly definitely from other experiences -- both from contemporaneous items of awareness that do not belong to it and from experiences that precede and follow it" (Beardsley, 1970. p. 10). Arnstine (1970) develops this more explicitly by stating that the experience or phenomena "must have value for the individual independent of any subsequent event, experience, or idea to which it might lead....All these experiences share an absorption in the value (pleasant or otherwise) of the immediate present, independent of possible consequences" (p. 31).

5. The experience is "intrinsically gratifying, or, in other words, brings with it both continuing enjoyment that is felt as part of the development of the experience, and a final satisfaction or fulfillment that may linger after the experience has ended" (Beardsley, 1970, p. 10). The intensity of aesthetic experiences are proportional to the magnitude of the feelings intrinsic to the experience itself.

Several writers, using criteria such as is described above, have brought their knowledge of aesthetics to bear on learning and educational process. Arnstine (1970), Barone (1983), Beardsley (1970), Eisner (1983), Grumet (1983), and Smith (1971) have all expressed how the aspect of art and the aesthetic might be analogous to educational experiences. Their views vary; the case they build issues directly from their initially presenting beliefs and biases. Their arguments are theoretical and depend heavily on what nuances of aesthetic understanding they wish to elucidate and which they choose to overlook. Aesthetics is not a trivial philosophy with simple understandings, rules for action and dictated interpretative strategies. It is a complex web of meaning characterized by the continual development of understandings and more than one school of thought.

Maintaining aesthetics at a metaphoric level relieves the burden of having to make claims of the absoluteness of any phenomena; in this instance whether or not a true aesthetic experience was realized. However to ask the question -- how does an understanding of aesthetic experiences shed new light on the anecdotal recollections of these teachers? -- remains one of interest and potential value.

Beardsley's criteria for an aesthetic experience addressed first the physical nature of the actual phenomena and the necessary attention and intentionality of the viewer of the phenomena. This criteria is a general one, perhaps a better definition of experience itself than of anything more specific or refined. In using it as a reference point to

reexamine the teachers' recollections yields a few insights. All of the teachers exhibited strong story-telling skills. That is, they provided detail and elaboration in terms of: graphic descriptions of the environments the events took place in; clear chronicles of the event sequences; and explicit recreations of both the appearance and actions of the students. The anecdotes were recreations from memory. Obviously they were strong and significant memories; the detail of the recall suggests that the teachers were indeed extremely involved in the original experience. It also suggests that these were not garden variety teaching and learning experiences.

The teachers expressed awareness of what actually transpired during the events that they reported. Their awareness developed not out of formalized understandings of teaching but from a failure of the anticipated outcomes to be realized. They did not anticipate that the students would show the learning they did, at the moment they did. The teachers spoke of being surprised and of being unable to take credit for the event; they had at that moment expectations for only routine experiences. The impact of similarity and contrast appears to have been a significant force. If Kushner's comment that appreciation is a result of understanding is correct than the emotional significance of the experience becomes easier to articulate. While the teachers encountered some difficulties accounting for how the experience came to be, they experienced no doubts as to what actually happened; about what the reality of the experience was.

Beardsley's third criteria is also helpful and with loose interpretation provides a strong reminder of how stereotypically the reported stories portrayed the values associated with "good" education. The stories had universal appeal in terms of the certain triumph over ignorance or handicap; perhaps they were as much a symbol of idealized educational experiences as actual phenomena. Certainly the stories had boundaries and could stand alone. As anecdotes that they existed in understanding as self-contained units of meaning. The teachers never reported further revelations of the student from that point; meaning was housed in the moment and the experience not in the student .

Beardsley's final comments relate to the aesthetic gratification associated with the experience. Arnstine (1971) attributes the experience of emotional satisfaction to the encounter with the unexpected -- not so extreme as to frighten but sufficient to demand attention. Psychoanalysis assumes a much stronger developmental stance. Aesthetic moments occur when the illusion is created that the outside world corresponds to deep inner needs. The emotions involved result from the momentary return to infancy when divisions between an inner and outer world are indistinct (Winnicott, 1953).

Such divergent explanations are the norm when human emotional response is involved; some things are unknowable -- in the sense of establishing causality -- with absolute certainty. The value of a comparison to aesthetic therefore does not lie within that type of

understanding. Instead value is sought in the acknowledgement that powerful emotion responses can and do occur in conjunction with events; the experience is typically positive and leads to an interest and openness for further experiences. It has been noted that this level of emotional response was a distinctive characteristic related within the teacher stories -- in terms of both teacher and student responses to learning.

There are many ways of looking at experiences. The comparison with aesthetic experience is somewhat unsatisfying when completed at the present level. An aesthetic understanding and comparison serves to challenge the results of this study. How can a phenomena which achieves significance in so many aspects (i.e. as a harbinger of the unexpected, as a symbol of idealized teaching values, as a generator of a positive emotional experience) be reasonably constructed or understood as representative of the act of learning? The comparison however does not answer this question -- it merely alludes to a complexity that previously went unrecognized. There are many aspects of these reported learning event which have resonance with the aesthetic experience. Has this inquiry revealed actualities about teaching or actualities about how an process as complex as the learning/teaching dynamic is reconstructed and symbolized in conscious memory.

Teachers as Intentional Artists

> But ultimately the pathographer [one who would interpret the psych of the artist through his art] is freer to risk, to play, to transgress, than is the clinician. And, depending on the motive for his interpretation, I think it is essential that he use and enjoy this freedom as an antidote to mechanical applications of theory of routine adherence to clinical standards. Of course, the dangers of 'wild' interpretations are ever present, but perhaps such dangers are inherent in all genuine aesthetic encounters. (Spitz, 1985, p. 95)

Current theoretical and applied understandings of teaching favor biases which maintain that all teacher behavior should be intentional. The notion of intentionality asserts itself through expectations that teachers can acquire and practice skills which will make themselves more effective; that there are right and wrong answers to questions of practice; and that the teacher, through an act of conscious will, puts into place the formula or essential ingredients that lead to student learning. Education is a means end endeavor; this necessitates the corresponding belief in conscious intentionality.

To believe teachers act intentionally does not establish the nature of their intentionality. Insofar as this research is an accurate reflection of teachers, intention: (a) is not always conscious; (b) reflects

more of the essential nature of the person than of pedagogical understandings; and (c) is valued in the establishment of an environment conducive to learning but not to learning itself. Most of the teachers interviewed expressed a clear sense that learning was a co-constituted experience between the teacher and the learner; most of the anecdotes revealed points where the learner's intentionality was more visible than the teacher's.

The philosophy of aesthetics may be appropriate to apply to the concerns about intentionality raised in this research. The themes that emerged out of the individual constructions of meaning did not resonate well with idealistic notions of teacher intentionality; educational reflection and explanation existed not as an end in themselves but to buttress a stronger communication of the self and personhood. The co-researchers had difficulty isolating and acknowledging intentional actions which seemed obvious from a outsiders perspective. To acknowledge intentionality seemed to imply responsibility -- a relationship few of the teachers seemed comfortable with.

Aesthetic analysis has developed some sense of what can be understood and what can be gainsaid about the creator of a particular work. It is to an aesthetic understanding of the artist standing in relation to his art that this discussion now turns.

In the process of creating a work of art the artist remains in an active interaction or dialogue with his creation. An interpretation of

intention needs to address transitions and changes in intentionality which are inevitable in active and ongoing constructions.

> He [the interpretor] needs to question, for example, the relationship between the psychological and the aesthetic demands that a growing piece places on the artist as he works....[The interpretor] must not neglect this aspect of intention -- the needs, dictates, strictures, and seductions of the work of art, its form, its internal structure. He must, in short, remember that the artist is after all an artist, and that in the process of creation, the created work enters into its own dialogue with its creator. (Spitz, 1985, p. 35)

This point was very similar to the ones made by the co-researchers when it was proposed that their reflections be summarized as vignettes. The reflections they shared were captured moments reflecting the present; no guarantee was made that the meanings would ever be created the same way again. The same question another day would reflect different contexts and experiences. It might well result in the telling of a different story.

Given aspects of an artists' work may also be extraintentional: that is affected by forces outside the artist's purview (Spitz, 1985). An exclusive focus on intentionality fails to acknowledge what is in fact likely to be a complex interaction between outside pressures, self, and

learned responses. This interpretative caution is perhaps even more relevant in education then in the arts. Art creates significantly more options for the ownership of ideas and experiences while education is accountability driven: teachers are expected to conform to mandated practice. Whose notions of practice are heard in the so called teacher voice?

Analysis of artists, especially by those with psychological backgrounds, gives credence to the notion of a dynamic unconscious. Artists are not immune from the complex habits of behavior, coping, and attribution that comprise character and personality. Spitz (1985) indicates that unconscious intention can be conceptualized in at least three different ways. First, development itself and the passage towards and through physical and emotional milestones establishes aspects of self which influence the form of creative action. Second, moments of internal conflict create a temporary tension which creates variability in intentionality. Third, that artistic intention can be a means end activity: the artist creates for personal satisfaction, validation and release.

Again active intentionality does not express itself in a static form. It is dynamic and reflects transformations that are created through interactive experiences (the first consideration in the interpretation of intentionality) or through adjustments in the experience of self (this most recent consideration).

In one sense these aesthetic understandings say no more than can be understood as a simple truth of life and living -- a person always brings a complete self to their actions. The form of the action will vary depending on the present context and current experiences. Intentionality, at some level, will reflect the changes in self and will seek to create opportunities so that the needs of self can be met.

A reminder of these notions of complexity, however, creates a mockery of the simplistic ways in which attempts are made to document, understand, and improve teaching behavior. The creative element of teaching behavior -- the constant demands to create environments, situations, and activities and to make choices and create action priorities ensures that teachers will generate a complex intentionality. It is in these situations that they become most like artists, with more of the freedoms of expression that artists have. Yet it is assumed that teachers will be able to discriminate between these forces which guide their actions and report on an intentionality which consists of pedagogical understandings only.

In this research project aesthetic interpretations constituted a better predictor of the reflections of teachers than did research on teacher thought or teacher voice. Reflection, as a methodology, can be seriously challenged by aesthetic notions of intentionality. Interpretation of this data required first and foremost an acknowledgement that the reflective acts were communicating far more than pedagogic beliefs.

Summarizing the Aesthetic Perspective

The aesthetic perspective provided significant new understandings of the experience of learning and of the corresponding experiences of teachers. By adopting several assumptions: (a) that experiences in the classroom can attain a levels of significance similar to aesthetic experiences; (b) that teachers co-constitute these experiences with students and therefore can be considered as intentional, expressive or creative agents; and (c) that teachers at times become an audience for the intentionality and creations of their students, the metaphor becomes particularly apt.

The metaphor is not a answer so much as it is a way of developing understandings of the kinds of inquiry most beneficial in education. This particular metaphor has served the purpose of restoring a sense of balance to pedagogical perspectives. Qualitative methodology can be charged with over simplification as much as quantitaive methodology can. In this particular context two essential premises of this research can be challenged. First, that teacher constructions of learning experiences are representative of actual teaching/learning experiences. Second that teachers can access and explicate their own intentionality around their sponaneous and intuitive teaching acts.

If the verbal reports of teachers are not what they (at first consideration) appear to be then the task remains for further inquiry to

establish interpretations of what in fact they are. Until then, a need for a balance that comes with the understanding that there are many realities of education and that it is possible to live with ambiguity and complexity is essential.

Chapter 7: Endings and Beginnings

The Journey Continues

In the previous section aesthetics is utilized as a metaphor with the potential to develop unique understandings and perspectives of the complexity which is learning. This inquiry did not start with the knowledge of this ending ; it started with a reaction -- a much more primitive science verses art stance.

My personal and professional frustrations combined neatly with the growing voice of writers in education advocating dismissal of the assumptions of science. The awakening of understandings grounded in actual practice offered the promise of freshness and novelty. Grounding in actual practise required a metaphor -- *teaching is far more art than science.* The assumption, although incompletely understood, was that elusive awareness of education and learning could be summarily revealed and developed through a simple incantation and appeal to mysticism. Hidden also was the personal yearning that bad education could be vanquished through the simple act of a paradigm shift. Despite all my experience and knowledge this hope prevailed: the answers I evolved would be different answers but they would be answers none the less.

The selection of this first metaphor became an act of active involvement for myself and my understandings. It established a focus

and became the foundation for the circular process of revelation and interpretation which followed; an opportunity to embrace a phenomenological and hermeneutic stance was created and justified. The self-reflection which was integral with this stance created opportunities to confront my frustrations at their sources. My needs seemed simple -- I had wanted to be effective agent of change. That I had not been successful frustrated me. I assumed one of two answers: either I was attempting the impossible (and I would have felt complimented by that result), or there was a simple answer that yet evaded me.

Simplicity is a hard thing to define. In this situation it refers to more than ease of implementation or understanding. It refers to the sense that all phenomena are reducible to an essence and that real understanding is achieved in understanding these essences. It is a belief that essences are external realities which contain absolute answers to guide practise and action. My claim would have been close to Honor's: there has to be an answer out there -- if only the right question could be framed and the right essence discovered.

Interviewing my co-researchers stimulated a reconsideration and reacceptance of my personal pedagogical beliefs. Through their words these beliefs were reaffirmed and reinstated as their value and application in education was acknowledged. Good teachers implemented what I understood to be good educational practices. These teachers did not speak to magic as much as they spoke to

pragmatic action, choice-making, relationships, and ownership of the decisions made. I became less willing to dismiss the knowledge I had acquired in such an arbitrary fashion.

My experience during the early stages of interpretation was also positive and reinforcing. I became aware of teacher priorities and teacher perspectives which allowed me to organize and restructure my own understandings. There was a sense of loose ends being tied together as issues such as risk-taking, teacher modelling, and teacher verses student responsibility were consensually addressed by the teachers.

It was here that the metaphor received its second transformation. As interpretation deepened I moved past the recognition of the known within the teachers' words to became aware of the unknown. I was struck by the aliveness of the teaching act; the unpredictability in the evolution of a learning moment; and the intense emotional involvement of the teachers which seemed to be more than feedback related. This was teaching in a different sense than I knew of it; indeed, it was different from any way I had heard a teacher speak of it.

There was a sense that even to the teacher some moments were gifts: a canvas that they had helped to create which when completed was more than they had imagined it could be. In both planning and in practical, well grounded applications of technique, space was always left for this element which could not be planned for. Teachers felt their

role was not in the creation of such a moment; their role was to avoid interfering, inhibiting, or suppressing its action and possibilities.

I came to accept that teaching could not be properly conceived as either completely art or completely science. Maintenance of art as a metaphor still seemed appropriate. However, revised by my evolving understandings it became: *art is a way of describing aspects of teaching and learning*. The sense had shifted from teaching *is* art to understanding that there were aspects of the educational experience which my present understandings could not embrace; I could not even enjoy a second-hand experience -- my lack of understanding barred my participation.

The most difficult shift that occurred was the last one. Interpretation of the teacher reflections engaged my full attention, such sharply defined statements of individuality and personal assertion were revealed. While experientially there had been more commonalties than differences, in interpretation, unique and individual understandings dominated. Moreover, the communications had the distinct flavor of acts of self-expression -- revelations and exposures of self (or lack there in) that went far beyond the explication of pedagogical understandings. Notions of teaching were completely embedded in notions of self; understandings shared became intimately revealing. Beyond surface constructions of teaching as a pragmatic activity they revealed the powerful force of their personhood. If not definable as artists they achieved something close:

the essence of who they were was alive and expressed in their acts of teaching.

The diffuse understandings that were generated during this quest required a unifying concept; some scaffold or supporting structure was necessary to create cohesion and coherency. Art as a metaphor was too limited. I was involved in creating an account of not just products (works of art), but of creators (artists), and of phenomena which were encounters with the first two elements. The understandings that I wished to address were no longer definable by their polarity with science nor by their connection to magic or mystery. Rather they required a metastructure to guide a complex interpretative act. It was to aesthetics I turned.

I embarked on this quest because of an awareness that my conceptions of learning and learning experiences were too narrow. I elected to adopt the perspective of the teacher; to see learning through their eyes. I acknowledged my need to learn to be comfortable with complex yet somewhat ambiguous understandings -- and I was amply rewarded. Learning experiences are greater than the sum of their parts; they form a system -- a hierarchy of meanings which layer the experience.

Buried beneath conventional ways of addressing learning are powerful experiences which maintain and validate equally powerful understandings of self. While the examples of learning addressed during this research do not appear to be the "common experience" they

are none the less highly significant; they seem to be symbolic experiences around which the sense of self as teacher is constructed and practised. These are understandings which are difficult to access; difficult to describe; but potentially more essential and real than a simplistic notion of "art" or "science" could ever be.

The Methodology Reviewed

It is far simpler in retrospect to examine and challenge a methodology than to predict the impact of each methodological decision. This is particularly true when the process of inquiry has been action and discovery based, with no assumptions for a particular outcome or result. Selection of a methodology should be lead by a question, however, at times has it has seemed that the methodology was more powerful then the question. In an open-ended project like this a compatible methodology is one that stimulates, adapts, and allows for many shades and depths of meaning to be exposed. In the broad sense this research and its accompanying methodology achieved that. In a narrow sense one of the reasons the research became so far ranging was the the methodology's inability to produce the kind of data originally targeted.

Critical to this foundation of this research was that the interview process would yield two types of data. First, that teacher recollections of particular events would be sufficient to construct a phenomenological

understanding of those events; second, that teachers would be able to reflect on and address those events in a way that externalized personal understandings and constructions. The first objective was directly linked to descriptions of lived experiences; reliability was supposedly secured through this attachment to actual events. Expressed meaning, therefore, retained an contextual reference. Even with this support a strong sense of the idealized and symbolized entered into the accounts. There seemed to be a strong suggestion that acts of learning defined the understanding of teaching; significant experiences of learning were transformed beyond memories of a phenomena into a deeper statement of teaching/learning culture.

In the second phase even less of experiential reference was present. A significant divergence in teacher responses immediately became apparent; unfortunately there were no clues to conclusively, or even reasonably, establish the intentionality behind each teacher's response. It was therefore difficult to develop a reasonable rational for the divergence -- except to say it stemmed from individual differences. The co-researchers' narratives are therefore locked into the isolated interpretations and understandings presented.

In designing the methodological approach, flexibility was an overt agenda; the intent was to establish and report on individual significance rather than prematurely seeking and superimposing a common understanding. In subtle and important ways the co-researchers responded to this freedom by evolving their own agendas.

In the end it could not be established for certain that what kind of significance they addressed. The psychological influence of the acts of self-presentation and self-disclosure may have meant that they addressed what was, in their understanding, significant to tell a consultant who would be formally reporting on their responses. Perhaps what their particular "school of thought" in education recommended they say framed their responses. Certainly there were inconsistencies in the narratives which lent credence to these challenges.

A second concern regarding the use of interview as the primary medium for the teachers to share their reflections was similar to this more general critique by Clark:

> We have elevated and lionized those few school teachers who are most like ourselves (reflective, analytic, verbally articulate, sophisticated in their knowledge, liberal and worldly in their values). These are the teachers whose planning, thinking, and decision-making we study and, unreflectively, portray as ideals for all other teachers, experienced and novice alike. While our rhetoric sounds a call for "power to all teachers", our research is cast in such a way that only those few teachers who are already most like us can identify with it. (Clark, 1986, p. 16)

An assumption was made that all the participants would be able to respond to the verbal-reflective nature of the task. It was not expected that equal verbal proficiency would be observed; it was expected that the medium selected would be a solid vehicle for the meanings the teacher wished to create. Again there was some evidence that this assumption was inappropriate.

In this case, as in most cases where research methodology is being reviewed, the concerns generated are not criticisms of the methodology itself. The concern lies with the incomplete match between the methodology and the question the research hoped to address. The use of teacher reflection as a strategy to understand teacher conceptions of learning and teaching appears to require careful consideration; definitive and generalizable understandings were not achieved with the present use of the strategy. A wonderful sense of deeper and richer understandings was established; the result involved the creation of more questions and a clear mandate to refine methodological practice.

Considerations which may extend the application of reflective strategies and which might have better met the the original intent of the inquiry include:

1. Increasing the opportunities for reflection and diversifying the focus of the reflection. The inclusion of several contexts might have helped establish the limits and potential generalizability of content

specific meanings The use of more than one interviewer might also create further understandings of the nature of the meaning generated.

2. Incorporating other mediums that encode meaning but that are less proximal, potentially less stressful, and allow more opportunities for private review and reflections. Written reflections in particular may be a practical alternative.

3. Engaging teachers in an explicit discussion of self-revelation, perhaps paired with modeling, to assist them in overcoming the natural fears and inhibitions associated with tasks involving self-disclosure and self-presentation.

On a broader scale the use of aesthetics as metaphor and tool to restructure perspectives on instruction and learning yielded additional methodological challenges. Without a strong belief system about how teachers might constitute learning situations -- the simple assumption that teachers can tell us should be rightfully challenged -- can we presume to judge their products (i.e. acts of learning)? Can intentionality be studied through simplified acts of inquiry or has the domain of philosophy been penetrated wherein we can only hope for evolving insights rather than exact answers? Can a phenomena that is co-constituted -- in this case between child and teacher-- ever be fully understood when only one agent is targeted for scrutiny?

As was noted early in this research project, the evolution and performance of methodologies for this type of research are of as much interest as the data itself. As the meanings of learning and teaching

develop so to must the methodology. In the general sense it is movement past the goal of yielding answers towards inquiry with the goal of learning to ask questions. In this endeavor the methodology evolves in tandem with reflection and interpretation. Closure of this inquiry is not an end but rather a pause to stop, reflect and summarize.

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